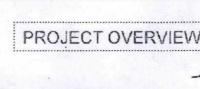
E-MAIL A

DNA



TAXI

PROJECT OVERVIEW

Goals & Objectives

History of the Project

Study Area & Description

Teamwork

**Environmental Review Process** 

Public Outreach Program

**Project Funding Process** 

LOCALLY PREFERRED ALTERNATIVE

ALTERNATIVES ANALYSIS

**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

**FAQs** 

ACRONYMS

#### **Goals & Objectives**

The Sacramento Regional Transit District (RT) is completing a stu expand transit service to the area between downtown Sacramento the Sacramento International Airport. The study includes preparation of environmental documentation and other req reports to allow a selected alternative to advance to implementation. In December 2003, the RT Board of Dire selected a locally preferred alternative (LPA) for the DNA Corridor best achieved the goals and objectives for the DNA Corridor. adopted LPA is Light Rail Transit (LRT) generally following 7th S and Truxel Road to the airport.

HOME

CONTACT US

Goals of the Downtown/Natomas/Airport (DNA) project include:

- Improve corridor mobility,
- Promote patterns of smart growth,
- Find cost-effective solutions for transportation problems ir corridor,
- Minimize community and environmental impacts,
- Provide solutions that are consistent with other planning eff

.......

· Have strong community support.

HOME CONTACT US E-MAIL A



PROJECT OVERVIEW

Goals & Objectives

History of the Project

Study Area & Description

Teamwork

**Environmental Review Process** 

Public Outreach Program

Project Funding Process

LOCALLY PREFERRED ALTERNATIVE

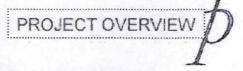
**ALTERNATIVES ANALYSIS** 

**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

FAQs

**ACRONYMS** 



#### **History of the Project**

In 1991, Sacramento Regional Transit District (RT) complete Systems Planning Study, which examined several corridors to ex the potential for future light rail extensions within the Gr. Sacramento Metropolitan Area. As part of this effort, RT complet route refinement study to assess and preserve right-of-way op for the future construction of a transit extension in Downtown/Natomas/Airport (DNA) area. An alignment for ligh transit in the DNA corridor was identified and incorporated into City's South and North Natomas Community Plans.

In 1993, the concept for expanding light rail transit progressed the Transit Master Plan, and the development of detailed studi three corridors. Subsequently, federal, state and local funding fo construction and operation for two corridor extensions, the S Sacramento and the Folsom extensions, was secured.

In 2001, RT completed a Multi-Corridor Study that identified the corridor as a potentially cost-effective transit corridor, and th Board directed staff to advance the DNA corridor into the Alterna Analysis phase. The locally preferred alternative, light rail tr generally following 7th Street and Truxel Road from down Sacramento to the Airport, was selected by the RT Board in Dece 2003.



PROJECT OVERVIEW

Goals & Objectives

History of the Project

Study Area & Description

Teamwork

**Environmental Review Process** 

Public Outreach Program

Project Funding Process

LOCALLY PREFERRED ALTERNATIVE

**ALTERNATIVES ANALYSIS** 

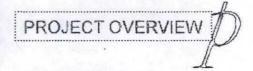
**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

**FAQs** 

**ACRONYMS** 

HOME CONTACT US E-MAIL A



#### Study Area & Description

The study area for the DNA Corridor is about 13 miles in length downtown Sacramento to the Sacramento International Airport.

- The study area for the DNA Corridor includes most of down Sacramento, South Natomas, North Natomas, Metro Air and the entire Sacramento International Airport property. southern boundary of the study area for transit improvemen the Sacramento Valley Station. For environmental analysis travel demand modeling purposes, a larger portion of down was analyzed. The expanded southern boundary follows R S (west of 11th Street), N Street and Capitol Avenue bet 15th Street to Alhambra Boulevard. The eastern bounda bounded by the Natomas East Main Drainage Canal, Route Business 80 and Alhambra Boulevard. Elkhorn Boulevard st as the Northern boundary of the study area, with the exce of the section of Airport property that is bounded to the nor Elverta Road. The western boundary of the study area incl the western edge of Airport property, Bayou Slough, Power Road, Del Paso Road, the Natomas West Main Drainage C the Natomas Main Drainage Canal and the Sacramento Rive
- Several different alignments were examined during Alternatives Analysis study. The alignment for the Lour Preferred Alternative (LPA) selected in December 2003 stated downtown Sacramento and passes the Amtrak Station through the Railyards area. The alignment continues through South Natomas and into North Natomas, passing Arco Arena to reach the North Natomas Town Center. A Town Center, the alignment shifts to the west and continorthwest to the Metro Air Park development and Sacramento International Airport.

View Study Area

Note: map will open in a new browser window

HOME CONTACT US E-MAIL A



PROJECT OVERVIEW

Goals & Objectives

History of the Project

Study Area & Description

Teamwork

**Environmental Review Process** 

Public Outreach Program

Project Funding Process

LOCALLY PREFERRED ALTERNATIVE

**ALTERNATIVES ANALYSIS** 

**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

FAQs

**ACRONYMS** 

# PROJECT OVERVIEW

#### Teamwork

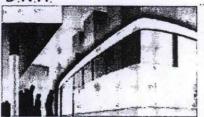
This study effort is being undertaken as a collaborative effort bet Sacramento Regional Transit District (RT) and the Federal Tr Administration (FTA), with support from the City of Sacramento County of Sacramento, Sacramento International Airport, Sacram Area Council of Governments (SACOG) and other local agencies. development of the Alternative Analysis is being conducted by RT who are supported by a team of consulting firms, including:

- PB Americas
- CH2M Hill, Inc.
- DKS Associates
- McCormick Rankin
- Manuel Padron & Associates
- Bay Area Economics
- Psomas
- Kleinfelder
- Koegel & Associates
- The Hoyt Company
- Alternative Resources, II
- Design Styles

A Technical Review Panel (TRP) and a Citizen's Review Panel (have been formed to meet periodically to discuss issues in Downtown/Natomas/Airport corridor. The TRP, consisting of county, state and federal staff from agencies with jurisdiction in DNA corridor, provides feedback to RT and the consultant tear technical issues in the corridor. The CRP provides an opportunit residents, business leaders, developers, and environmental community groups to contribute to the development of plans in corridor.

E-MAIL A

DNA



PROJECT OVERVIEW

Goals & Objectives

History of the Project

Study Area & Description

Teamwork

**Environmental Review Process** 

Public Outreach Program

Project Funding Process

LOCALLY PREFERRED ALTERNATIVE

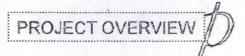
**ALTERNATIVES ANALYSIS** 

**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

FAQs

**ACRONYMS** 



#### **Environmental Review Process**

RT, the local agency sponsoring the environmental review proces this project, is governed by federal and state laws and regular requirements. The National Environmental Policy Act (NEPA) requirements. The National Environmental Impact Statement (EIS major federal actions, such as the funding of fixed guideway trappoints, that significantly affect the environment. The Calif Environmental Quality Act (CEQA) requires the preparation of Environmental Impact Report (EIR) where there is substatevidence that a project may have a significant effect on environment. Under both NEPA and CEQA, opportunities exist for public to provide input into the evaluation of alternatives and progressive projects.

HOME

CONTACT US

For the DNA project, the first step in the environmental reprocess is the circulation of a Draft Program Environmental In Report (EIR), which occurred on December 28, 2007. The Pro-EIR covers the entire project from downtown to the air Subsequently, as individual segments of the project are advatoward implementation, more specific project-level environm documents will be prepared and circulated. These may be combited with NEPA where a major federal action is anticipated.

#### **Project Phases**

Alternatives Analysis (Completed 2003)

- Identify Goals and Objectives
- Develop Alternatives
- Evaluate Alternatives
- Prepare Alternatives Analysis Report
- Receive Public Comment
- Select a Locally Preferred Alternative

#### **Environmental Documentation** (Currently Underway)

- Draft Program Environmental Impact Report (EIR) coventire corridor
- Public Comment
- Final Program EIR
- Draft Project EIR on first segment
- Public Comment
- Final Project EIR on first segment
- Draft Project EIR/EIS on subsequent segment(s)
- Public Comment
- Final Project EIR on subsequent segment(s)

.....<u>top</u>.....

HOME CONTACT US E-MAIL A



PROJECT OVERVIEW

Goals & Objectives

History of the Project

Study Area & Description

Teamwork

**Environmental Review Process** 

Public Outreach Program

**Project Funding Process** 

LOCALLY PREFERRED ALTERNATIVE

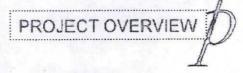
**ALTERNATIVES ANALYSIS** 

**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

**FAQs** 

**ACRONYMS** 



#### **Public Outreach**

The public participation component of the DNA Study was design-complement the technical flow and progress of the Study, making every effort to reach the key stakeholders, policy makers general public especially during critical milestones of environmental review and design process. The public particip program for the DNA Study is an on-going process and includes:

- Public workshops and forums
- Citizen Review Panel
- Distribution of newsletters/flyers, and other informat materials
- Website access
- Telephone hotline 916-930-1192 (24 hour access)

Find out how you can get involved!

PROJECT OVERVIEW

Goals & Objectives

History of the Project

Study Area & Description

Teamwork

**Environmental Review Process** 

Public Outreach Program

Project Funding Process

LOCALLY PREFERRED ALTERNATIVE

**ALTERNATIVES ANALYSIS** 

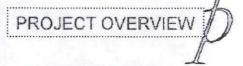
**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

FAQs

**ACRONYMS** 

HOME CONTACT US E-MAIL A



#### **Project Funding Process**

A variety of local, state and federal funds will be required to built operate any new transit improvements identified in the DNA Corr For construction funds, local sources could include developer fees right-of-way dedication sales tax revenues, while at the state funding could be provided through the State Transport Improvement Program (STIP). At the federal level, RT could o funds through the Federal Transit Administration and its New S Program, which is designed to provide capital grants for new guideway projects. The New Starts Program could potentially pro 50% of the funds needed to build a fixed guideway system in corridor, with the remaining funds provided by local and state sou

RT expects to implement the first segment of the DNA project will federal funds.

HOME CONTACT US E-MAIL A



PROJECT OVERVIEW

LOCALLY PREFERRED ALTERNATIVE

ALTERNATIVES ANALYSIS

**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

FAOS

**ACRONYMS** 

## LOCALLY PREFERRED ALTERNATIVE

#### **RT Board Selects DNA LPA**

At the RT Board Meeting on December 15, 2003, the RT E selected a Locally Preferred Alternative (LPA) for the DNA Study Alternative selected was Light Rail Transit along Truxel Road.

- See RT Issue Paper and Resolution
- See Map of the LPA

The DNA Study will now move into the environmental review pl The development of the DNA Corridor Draft Environmental In Statement and Environmental Impact Report (DEIS/R) will governed by federal and state regulatory requirements.

RT's Board and Staff strongly encourage community involvement are committed to continuing working with the community during in refining and developing a refined definition of the alignment.

Should you have any questions regarding the Study, please co our community outreach consultant, Kristy Day, at The Company, (916) 448-2440.

View public comments received on the DNA Study.



PROJECT OVERVIEW

LOCALLY PREFERRED ALTERNATIVE

ALTERNATIVES ANALYSIS

Overview

Alternatives Analysis Report

**Detailed Alternatives** 

Alternative Selection Process

**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

**FAQs** 

**ACRONYMS** 

HOME CONTACT US E-MAIL A

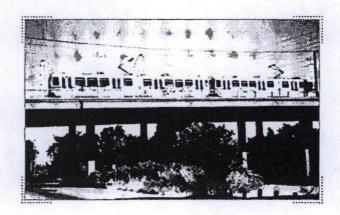
## ALTERNATIVES ANALYSIS

#### Overview

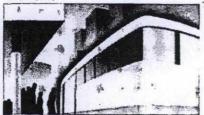
Between 2001 and 2003, the Sacramento Regional Transit Di (RT), in cooperation with the Federal Transit Administration (I performed an Alternatives Analysis (AA) to evaluate future tr improvements in the Downtown/Natomas/Airport (DNA) Corrid Sacramento, California. Consistent with FTA's New Starts guidel the AA process was a coordinated effort between RT, members c public, public agencies, and other stakeholders with nume opportunities for input at each stage in the planning process.

The AA Report compared and evaluated alternate transit technoland alignments through the DNA Corridor. The AA technical and and associated public review and responses were designed to sul and encourage the process for adopting a locally preferred alter (LPA) to be carried forward for a full environmental review.

In 2003, the RT Board considered the AA results and chose ligh along an alignment generally following 7th Street and Truxel Roz the locally preferred alternative.



HOME CONTACT US E-MAIL A



PROJECT OVERVIEW

LOCALLY PREFERRED ALTERNATIVE

**ALTERNATIVES ANALYSIS** 

Overview

Alternatives Analysis Report

**Detailed Alternatives** 

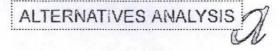
Alternative Selection Process

**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

**FAQs** 

ACRONYMS



#### Detailed Alternatives Revised July 1, 2004

Based on the initial screening of alternatives, the alternaturently under consideration include a No-Action Alternative Transportation Systems Management (TSM) alternative, and Light Rail Transit (LRT) alternatives. In addition, several sub-operate being evaluated as part of these alternatives. A brief description the alternatives is provided below.

**Alternative 1: No-Action.** This alternative consists of highway transit systems existing as of year 2000, plus program improvements. It serves as the NEPA baseline against which environmental and community impacts of the other alternatives compared.

Alternative 2: Baseline/TSM Alternative. This alternative cor of all reasonable cost-effective transit service improvements  $\nu$  the DNA corridor that are in the financially constrained reg transportation plan, short of a major investment.

Alternative 3: LRT to Airport via Truxel Road. This altern consists of double-track light rail service from downtown Sacram to the Sacramento International Airport and includes an LRT b with bicycle and pedestrian access across the American River thr Discovery Park at Truxel Road. Feeder bus service is provided to LRT stations. This alternative was adopted as the Locally Prefi Alternative for the DNA Corridor by the RT Board of Director December 15, 2003.

Alternative 3A: Truxel LRT Starter Line. This alternative cor of a mix of single and double-track light rail service from down Sacramento to the Sacramento International Airport and include LRT bridge with bicycle and pedestrian access across the Ame River through Discovery Park at Truxel Road. Feeder bus servi provided to most LRT stations.

Alternative 3B: Truxel LRT Minimum Operable Segment (M This alternative consists of single and double-track light rail se from downtown Sacramento to the Natomas Town Center in I Natomas. A direct bus connection will be provided from the Natomas Town Center to the Sacramento International Airport. This altern includes an LRT bridge with bicycle and pedestrian access across American River through Discovery Park at Truxel Road. Feeder service is provided to most LRT stations.

Alignment sub options to those described above are being consic at specific locations. These include, but are not limited to:

- An alignment along 5th/6th Street between Sacramento V Station and the American River
- Crossing the American River at North 5th Street;
- Options for crossing Interstate 80 using the existing Truxel overcrossing or a new LRT-only overcrossing east of the exi structure.

HOME

CONTACT US

E-MAIL A



PROJECT OVERVIEW

LOCALLY PREFERRED ALTERNATIVE

**ALTERNATIVES ANALYSIS** 

Overview

Alternatives Analysis Report

**Detailed Alternatives** 

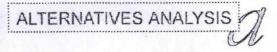
Alternative Selection Process

**GET INVOLVED** 

**NEWS & LIBRARY ARCHIVES** 

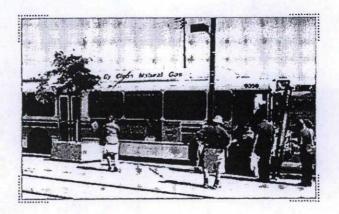
**FAOs** 

**ACRONYMS** 



#### **Alternative Selection Process**

Evaluation Criteria have been developed to determine how well alternative meets the goals and objectives of the study. This a the alternatives to be compared to each other using commeasures. Certain criteria have been used, including consideration the local goals and objectives established for the study, measur effectiveness identified during scoping, and criteria established by Federal Transit Administration (FTA) for New Starts projudditionally, ideas and priorities suggested by the public have considered for use as criteria in screening the alternatives. Evalu criteria includes measures of cost-effectiveness, travel time sav impacts to communities and natural resources, and compatibility existing plans.



The Natomas Basin Conservancy 1819 K Street, Suite 200 Sacramento, CA 95814

> Phone: 916.264.8245 FAX: 916.264.8246



## IMPLEMENTATION ANNUAL REPORT

• CALENDAR YEAR 20

MARCH 1, 2002

- 1 Introduction
- 2 Table of Contents
- 3 List of Tables
- 4 Highlights
- 5 IA Section 5.2
- 6 NBHCP Section IV.G.3
- 7 NBHCP Section IV.G.4
- 8 NBHCP Section IV.D.1
- 9 Table of Appendices
- 10 Glossary and Abbreviations
  - © The Natomas Basin Conservancy 2002

#### INTRODUCTION

This report responds to a requirement of the Natomas Basin Habitat Conservation Plan (Section IV.G.4) and the Implementation Agreement (Section 5.2) which calls for an implementation annual report. The report is due within 60 days after the close of each calendar year.

This is the third full-year annual report prepared by the Conservancy. As additional accomplishments of the Conservancy accumulate and responsibilities expand with the growth of mitigation acreage, more information will be available in future annual reports.

The goal of the presentation style of this report is to follow the reporting requirements of the Natomas Basin Habitat Conservation Plan and Implementation Agreement. Since reporting compliance is a key element in the operations of the Conservancy, this format should be helpful to the reader in assuring all reporting requirements are fulfilled.

The Conservancy is pleased to present this report and to share the many positive steps it has taken towards successful implementation of the Natomas Basin Habitat Conservation Plan.

Those wanting further information may contact the Conservancy at:

THE NATOMAS BASIN CONSERVANCY 1819 K Street, Suite 200 Sacramento, CA 95814 Telephone: 916.264.8245 FAX: 916.264.8246

#### SPECIAL NOTE

This version of the 2001 Implementation Annual Report contains only the main body of the report itself, and appendices are not provided. Copies of the 13 appendices (see "Table of Appendices" in this report) are available from the Conservancy for public viewing should they be needed. Also, although this version is nearly identical to the official "record" version, there may be slight variances. It is intended to provide a more "readable" and cost-effective presentation of the 2001 Implementation Annual Report. Those wishing copies of the appendices and official record version may obtain them for normal copying charges.



Swainson's hawk (Buteo swainsoni)

#### TABLE OF CONTENTS

Intro	oduction	i
Tabl	e of Contents	ii
List	of Tables	iii
Hig	hlights of the 2001 Implementation Annual Report	iv
Ī.	Implementation Agreement Section 5.2	
	1. The number of acres of land approved for development	1
	2. An estimate of the amount of land graded	1
	3. The aggregate number of acres acquired or encumbered	1
	4. A description of any land conveyed to others	3
	5. A summary of the aggregate number of acres owned in fee with managed marsh	3
	6. A description of management activities	4
	7. A description of habitat enhancement activities	10
	8. A report on scientific research authorized or conducted	10
	9. An itemization of the number of individuals of covered species taken	10
	10. A yearly financial report	10
	11. An assessment of the adequacy of funding	11
	12. Maps	11
	13. Copies of data collected and reports generated	12
	14. An accounting of the endowment fund	12
	15. Other information	12
II.	Natomas Basin Habitat Conservation Plan, Section IV.G.3	
	1. Area converted to urban development	14
	2. Mitigation land accounting	14
	3. Financial status	14
III.	Natomas Basin Habitat Conservation Plan, Section IV.G.3	
	1. Amount and location of lands approved for urban development	15
	2. A description of mitigation lands	15
	3. An accounting of any taking activity	17
	4. Plans for acquisition of mitigation lands	17
	5. An outline of habitat management, enhancement and monitoring	17
	6. Pertinent results of surveys and monitoring	17
	7. Pertinent information from RD 1000 and Natomas Mutual Water Company	17
	8. Other pertinent information	18
IV.	Natomas Basin Habitat Conservation Plan, Section IV.D.1	19
Tab	ole of Appendices	20
Glo	ossary and Abbreviations	21

#### LIST OF TABLES

Table 1, HCP Fee-Paid Acres	1
Table 2, Land Acquisition Tally	2
Table 3, Managed Marsh Tally	3
Table 4, Native Trees and Shrubs Planted in 2001	6
Table 5, HCP Fee History	11
Table 6, Reserve Characteristics Illustration	16



Giant garter snake (Thamnophis gigas)

### 2001 HIGHLIGHTS THE NATOMAS BASIN CONSERVANCY

#### Acquisition

- The Conservancy acquired two (2) farms during year 2001, bringing the total number of farms acquired to date to eleven (11).
- The total acres of mitigation land acquired has grown to 1,792.637
- Phase One environmental reports, American Land Title Association (ALTA) land surveys and aerial photographs were completed on each of the Conservancy's mitigation land acquisitions.

#### PROGRAMMATIC

- The Conservancy's extensive site-specific land management plan for the mitigation acreage acquired through January 1, 2001 was completed and formally accepted.
- The Conservancy worked to protect areas on its existing mitigation lands where NBHCP species are known to exist.
- A Swainson's hawk monitoring report and giant garter snake monitoring report were conducted for the Conservancy again for the third straight year.
- The Conservancy issued a timely implementation annual report, corporate annual report, financial audit and all other reporting documents during the year.
- Staff worked with Sutter County interests and the Metro Air Park Property Owners' Association to facilitate entrance into NBHCP process.

#### BUDGET AND FINANCE

- The long-term finance model was updated and a fee increase was requested, granted and implemented.
- The Conservancy's endowment fund account continues to grow, and remains conservatively invested in order to insure its long-term viability.
- The Conservancy ended the year in strong financial condition.

#### OTHER

■ The Conservancy inaugurated its web site (www.natomasbasin.org), and has included copies of its species monitoring reports and other relevant information on the site. Each mitigation land acquisition is mapped, and this map is available on the web site. Also available on the site as is an aerial photograph of each of the Conservancy's mitigation land locations.

## THE NATOMAS BASIN CONSERVANCY

#### ANNUAL REPORT 20011

- I. IMPLEMENTATION AGREEMENT SECTION 5.2
- The number of acres of land within the Permit Area approved for Urban Development during the previous calendar year for which fees were collected.

During 2000, the number of acres of land within the permit area for which urban development permits were issued was 2,745.7 (see "Implementation Annual Report, Calendar Year 2000, by The Natomas Basin Conservancy). During 2001, the amount was 1,061.7 acres, bringing the total to-date to 3,719.4. A full report on the number of acres permitted for urban development can be found in Appendix A. A report from the City of Sacramento's Accounting Department shows a schedule of acres for the covered period for which fees have been paid:

TABLE 1
THE NATOMAS BASIN CONSERVANCY
HCP FEE-PAID ACRES

_		
	PERIOD	HCP FEE PAID ACRES
	Through December 31, 1998	1,515.66
	January 1-December 31, 1999	1,465.47
	January 1-December 31, 2000	598.07
	January 1-December 31, 2001	242.09*
	All years through December 31, 2001	3,821.29

<sup>\*</sup> Additionally, 141.14 acres were donated in lieu of fees.

See Appendix A for a full report from the City of Sacramento regarding acres of land for which urban development permits have been issued and fees have been collected. The mitigation acreage is also mapped, and these maps can also be found in Appendix A.

An estimate of the amount of land within the Permit Area actually grubbed or graded for Urban Development during the previous calendar year.

This City of Sacramento-provided information can be found along with the maps and related material in Appendix A.

 The aggregate number of acres of Conservancy Land acquired in fee simple or encumbered with Conservation Easements by the Conservancy during the previous calendar year. The listing shall show the acreage and the proportion of lands which are Managed Marsh.

An accounting of the aggregate number of acres of Conservancy Land acquired in fee simple follows in Table 2. All Conservancy land acquired to date has been by fee simple acquisition.

Highlighted text (bold or italia) follows the Natomas Basin Habitat Conservation Plan (NBHCP) and Implementation Agreement (IA) reporting requirements or guidelines. One exception is that illustrations may have headers and titles in bold which are not designated in the NBHCP or IA.

At the end of 2001, the Conservancy had nearly completed its first managed marsh conversion project and was well on track to conduct additional such conversions during 2002. The Conservancy adopted a revised site-specific land management plan (see Appendix D) during 2001 that calls for implementation of the managed marsh component of mitigation lands. This plan was completed for the 1,630 acres of mitigation lands acquired. It was adopted by the Board of Directors of the Conservancy on June 1, 2001 (Conservancy Board of Directors resolution #06.01.04). The Board later adopted resolution #11.01.04 which engaged the services of a contractor to assist with updating the site-specific land management plan to cover the Conservancy's additional mitigation lands, at that point totaling 1,792.64 acres. The update is expected to be completed and approved in late-Spring 2002 and will provide still greater detail of the managed marsh coverage on mitigation land. Like the first site-specific land management planning effort, the latest effort calls for at least 25 percent of acquired mitigation lands being dedicated to managed marsh uses in compliance with the NBHCP.

The Board of Directors authorized the preparation of construction drawings for the 2002 managed marsh construction effort (Conservancy Board of Directors resolution #11.01.05).

TABLE 2
THE NATOMAS BASIN CONSERVANCY
LAND ACQUISITION TALLY THROUGH 12.31.01

	PROPERTY	DATE ACQUIRED	ACRES
ALTERNATION OF THE PARTY OF THE	Silva	1.7.99	159.200
e IPM 31	Betts	4.5.99	138.992
	Kismat	4.16.99	40.293
	Bennett (C.L.)	5.17.99	226.675
	Bennett (H&B)	5.17.99	132.486
	Lucich North*	5.18.99	267.986
	Lucich South	5.18.99	351.889
	Brennan	6.15.00	241.376
	Frazer	7.31.00	92.600
A style dumai)	Souza**	7.2.01	44.680
	Natomas Farms	7.9.01	96.460
	Total		1,792.637

<sup>\*</sup>Lucich may be reduced 20.68 acres pending negotiations between the seller (Lucich) and SAFCA. The "Lucich" tract is referred elsewhere in this report as South Sutter Venture Group

<sup>\*\*</sup> Agreement of Purchase and Sale provides that if seller can obtain partition authorization from County of Sacramento within a 24-month period from the date of sale, 3.68 acres can be purchased back from the Conservancy.

TABLE 3
THE NATOMAS BASIN CONSERVANCY
MANAGED MARSH TALLY

AT YEAR-END	ACRES ACQ	UIRED	APPROVED PLAN ACRES**	APPROVED PLAN MANAGED MARSH	ACRES IN MANAGED MARSH***
1998*		0	0	0	0
1999	1	,317.5	21 0	0	0
2000	1	,651.4	97. 1,296	324	0
2001	1	,792.6	37 1,651	603	192.5
2002 (proj.)	2	,110	1,793	n/a	238.5

\* Conservancy Board of Directors was empanelled in December 1998, staffed in March 1999.

\*\* "Plan" means site-specific land management plan. Current Plan calls for well in excess of 25% target

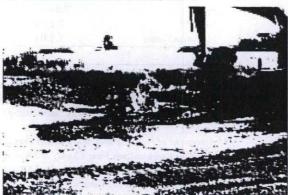
\*\*\* Means construction completed as of year end.

 A description of any lands conveyed by the Conservancy to the USFWS, CDFG, any other governmental entity, and to any other person or entity during the previous year.

The Conservancy has not conveyed any land to the USFWS, CDFG or any other governmental entity.

5. A summary of the total aggregate number of acres of Conservancy Lands owned in fee simple or encumbered with Conservation Easements in favor of the Conservancy as of the end of the previous calendar year. The summary listing shall show the acreage and the proportion of lands which are Managed Marsh.

See discussion in number three (3) above.



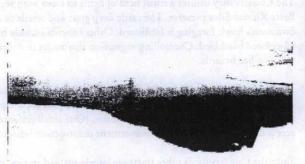
Water Cutover on Betts-Kismat-Silva Restoration and Enhancement Project. The Conservancy began work to construct managed marsh on the 338-acre BKS preserve in North Sacramento County during 2001. Photo depicts the first water to flood up managed marsh on the site. Photo: The Natomas Basin Conservancy.  A description of the management activities which the Conservancy conducted during the previous year and the management activities proposed for the coming year.

Following the outline in the NBHCP page IV-40 ("Habitat management activities"), the following list is presented.

#### a. Control of water supply and availability.

The Conservancy continues to manage the water resources and situations as described in last year's implementation annual report.

The Conservancy's management is well aware that without adequate water supply, the 25 percent managed marsh requirement in the NBHCP would be jeopardized. Moreover, the ability to provide for rice operations would also be at risk, and income from rice operations provides a very large share of the revenue necessary for non-farmed land activities, including maintaining the managed marsh component. Accordingly, great care has been taken by the Conservancy with respect to acquiring and assuring full rights to water supplies as it acquires property for mitigation.



First Managed Marsh Floodup on Betts-Kismat-Silva Restoration and Enhancement Project. The first flooded managed marsh (before vegetation planting) on the BKS preserve in North Sacramento County during 2001. Photo depicts the first water to flood up managed marsh on the site. Photo: The Natomas Basin Conservancy.

The Betts-Kismat-Silva tract, while not within the region's water district, has access to drainage water coming from an adjacent fish farm. The Conservancy made certain the right to this water was spelled out in the acquisition of the property, and the result was that the right to this water was recorded with the property deed. The Conservancy has critically examined the quality of this water, since the water served as an essential part of implementing the site-specific land management plan (see Appendix D). The report confirms the quality of the water is excellent, and was extensively used in the restoration and enhancement activity on this tract during 2001 (see above photos).

Regarding other mitigation land, management has also worked to transfer to the Conservancy stock in the Natomas Central Mutual Water Company with all mitigation land acquisitions within the Water Company territory. The Water Company Board of Directors has approved the Conservancy's requests for the transfer of ownership, and stock certificates have been received. The Conservancy staff attends the Water Company's annual meetings and casts

shareholder votes in the Conservancy's interest. It also continues to explore with Water Company officials opportunities that exist for water provision to those tracts the Conservancy owns which do not hold water rights.<sup>2</sup>

## b. Suitable agricultural practices (e.g., rice growing for giant garter snakes and production of other crops for Swainson's hawk foraging).

On all its mitigation land acquisitions, Conservancy management has adjusted the agricultural practices to be in line with the NBHCP. Past activity included reducing cattle populations in the case of the Betts-Kismat-Silva tract, as well as upgrading the quality of the cattle operation in general.

Elsewhere, the Conservancy has worked to maintain healthy and productive rice farming operations on significant portions of its acquired mitigation land. Conservancy staff regularly talk with rice farmers about farming in ways that are supportive of giant garter snake populations. Much of the specific effort is outlined in the site-specific land management plan (see Appendix D).

#### c. Grazing programs to eliminate weeds or control vegetation.

If left unchecked, grazing could be destructive to habitat. Properly managed, it can be helpful to at least two of the covered species in the NBHCP by controlling weeds and vegetation. The Conservancy utilizes a small herd of cattle to assist with vegetation management on the Betts-Kismat-Silva preserve. The cattle keep grass and weeds to an appropriate height so that Swainson's hawk foraging is facilitated. Other benefits include habitat improvement for the tri-colored blackbird. Controlling vegetation also assists in controlling plant mass, which can result in fire hazards.

The Conservancy's also completed fencing the Betts-Kismat-Silva tracts during 2001, consistent with the site-specific land management plan for the property. The fencing helps manage the cattle herd presently on the site. (One small unfenced area remains to facilitate access during restoration and enhancement construction refinement and testing.)

Since the Conservancy's other tracts are largely planted to rice, there is no need to conduct grazing activity on the tracts. The exception is the acquired Brennan tract. Its ability to provide grazing capabilities is under consideration.

#### d. Exotic species control.

The Conservancy has brought to various of its preserves representatives of the U.S. Fish and Wildlife Service, the California Department of Fish and Game, pest control advisors and farmers to inspect the tracts and discuss exotic weed control options. The most serious weed threat is an exotic species of weed, thistle. Bull thistle and western star thistle are the most prominent. Consistent with the site-specific land management plans, the Conservancy has moved to control exotic plant species. This will be particularly challenging during 2002 on

In addition to the Conservancy's Betts, Kismat, Silva tracts, the Brennan tract does not enjoy participation in the Natomas Central Mutual Water Company. Water to the tract is provided from other sources, including groundwater pumped by two wells on the property.

the Betts-Kismat-Silva site. This site has been planted with numerous native grass, shrub and tree species. Keeping the weeds, particularly the exotics, under control will give the newly planted native vegetation a greater chance of survival.

The Conservancy has yet to identify non-plant exotics that present any significant threat to full successful implementation of the NBHCP.

#### e. Erosion control.

Since Conservancy lands are mostly rice fields, and since the rice fields have been precision-leveled, there are relatively few erosion control needs or opportunities on current Conservancy land holdings. On the portion of the Conservancy's land that is not in rice production, pasture is the most prevalent land use. Therefore it too, since being covered with ground cover throughout, and relatively well developed with agricultural drains, offers little opportunity or need for erosion control efforts.

#### f. Enhancement of native plant communities.

During 2001, for the first time, the Conservancy has planted a number of native plants on its preserves. This was focused on the Betts, Kismat and Silva tracts. Table 4 shows the native trees and shrubs the Conservancy planted at this project.

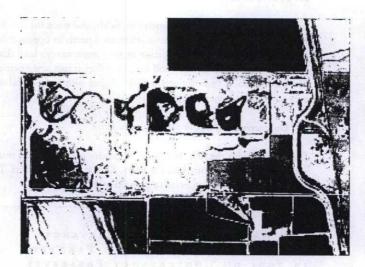
TABLE 4
THE NATOMAS BASIN CONSERVANCY
NATIVE TREES AND SHRUBS PLANTED
IN 2001 ON CONSERVANCY PRESERVES

A TANK TO THE TOTAL THE	COMMON NAME	SCIENTIFIC NAME
	Tree species	
	Blue oak	Quercus douglasi
	Fremont Cottonwood	Populus fremontii
	Goodings Black Willow	Salix goodongii
	Oregon Ash	Fraxinus latifolia
	Valley Oak	Quercus lobata
	Western Sycamore	Platanus racemosa
	s sell various and subjective and	
	California Blackberry	Rubus vitifolius
	California Wild Grape	Vitis californica
	California Wild Rose	Rosa californica
	Coyote Brush	Baccharis pilularis
	Mule Fat	Baccharis vimimea

The Conservancy's approved site-specific land management plan lists numerous native grass species. Among the many that were planted during 2001 on the Betts, Kismat and Silva properties were Blue Wild Rye, California Barley, Idaho Fescue, Native California Brome, Pine Bluegrass and Purple Needlegrass.

#### g. Habitat enhancement activities for the covered species (e.g., construction of artificial burrows for giant garter snake).

The Betts-Kismat-Silva preserve restoration and enhancement project focused on giant garter snake-friendly design (see photo below). The sinuous channels of the managed marsh attempt to mimic successful habitat found in the federal wildlife reserves in the Sacramento Valley. The basking islands and potholes also were designed to afford benefit to the giant garter snake.



**BKS Restoration** and Enhancement construction project, Summer 2001. Aerial photo of the Conservancy's BKS reserve in North Sacramento County showing construction underway. The project represented the Conservancy's first restoration and enhancement effort. Photo: CalAero for The **Natomas Basin** Conservancy.

Additional information on habitat enhancement activities can be found in the site-specific land management plan (see Appendix D), with specific reference to the BKS site section.

#### b. Predator control.

The Conservancy Board of Directors previously adopted a resolution<sup>3</sup> which provides for pet restrictions on the Conservancy's rented property.<sup>4</sup> Dogs and cats running loose on the property are seen as potentially harmful to some of the covered species and therefore the Conservancy has remained alert to possible predator and related problems. On numerous occasions, the Conservancy has also contacted Sacramento County Animal Control to remove stray dogs left on the Conservancy's land and which roam the area. These control efforts have all been successful.

This past year for the first time, the Conservancy has begun to notice domestic cats roaming the preserve. These will need to be managed in the same way as the aforementioned dog population has been.

Additionally, the Conservancy has paid very close attention to the proliferation of coyotes on the Betts, Kismat and Silva tracts. Several new dens cropped up this past year, and produced numerous offspring. Some of these dens are a matter of a few feet from burrowing owl nests.

Resolution #3.99.23 includes "pet restrictions."

The dog that lives on the Betts tract is owned by the previous land owner but cared for by the Conservancy's caretaker. Since the house lies near the entrance to the Conservancy's land, the dog is helpful in alerting the caretaker to trespassers. Additionally, the dog remains in a very large fenced area and is extremely well trained to never go beyond the fenced area.

The Conservancy has consulted with the TAC on numerous occasions regarding this situation. The TAC has counseled to observe the populations, and if they get excessive, then control measures will be warranted. Otherwise, the coyotes are seen as part of the natural habitat.

#### i. Control of pesticide uses on reserve lands.

The Conservancy states in all of its agricultural leases and right of entry agreements that the use of pesticides on Conservancy mitigation land is strictly controlled. In its land management activity, the Conservancy rarely allows pesticides to be used. Insecticides have not been permitted on Conservancy-owned mitigation land with the exception of use in active rice farming operations. However, rice production generally does not require significant insecticide applications.

Of all the pesticides, the only one permitted to date on Conservancy owned mitigation land (other than in rice production) are herbicides. These have infrequently been used for two purposes. First, to reduce plant mass around structures, particularly those subject to fire (numerous incidents of arson have been reported to authorities in and around the northern portion of the Natomas Basin). In these instances, the Conservancy has used herbicides not so much to kill vegetation growth around such structures, but rather, to stunt its growth. This has worked well. Second, herbicides have been used to control exotic vegetation. The Conservancy has worked hard to allow native vegetation a better chance, and especially with the extensive planting of native plants in 2001, herbicides have been and will be used on a limited basis for this purpose. In all cases, the use of herbicides in non-rice production areas has been allowed only after cattle grazing, mowing and other practices have proven impractical or impossible.

#### j. Enhanced ditch and drain management for the covered species on reserve lands.

The Conservancy conducted extensive ditch and drain management work on its BKS site in 2001 as a result of the restoration and enhancement project conducted there. Work continues on this project in an effort to refine and perfect management practices so that covered species are presented the best possible conditions.

The Conservancy staff continues to meet periodically with senior management of RD 1000 and the Natomas Central Mutual Water Company to point out areas in and around Conservancy mitigation land where giant garter snakes have been found. These discussions, as well as other familiarization activities, have built an excellent working relationship, and the covered species have or will ultimately benefit directly.

## k. Coordination of any research conducted within reserves with outside species experts and other individuals and groups.

No research activities were conducted on Conservancy mitigation lands in 2001. However, it is envisioned that a great deal of work will be conducted in the near future. The Conservancy is exploring the possibility of developing a research center on the BKS tract and has explored funding for such an effort.

#### I. Management activities proposed for coming year.

As to activities for the coming year, the Conservancy has adopted a revised and updated site-specific land management plan. Carrying out these land management plans will heavily influence Conservancy activities for 2002. In addition, three additional farms have been acquired since the adoption of the revised land management plan. Accordingly, the Conservancy will be actively working to update and amend the plan.

The Conservancy has completed the earthwork, water control and vegetation planting work for the restoration and enhancement project on its 338-acre Betts-Kismat-Silva preserve in Sacramento County. Since this is the first of the major restoration and enhancement efforts by the Conservancy, the Conservancy will be carefully managing this preserve as it matures. Since it is intensively watered, the Conservancy will also be making sure to learn to manage the water in the appropriate manner. TAC members are frequently exposed to this project. The Conservancy periodically seeks advice and guidance from the TAC or its individual members on this and other projects it is involved with, and plans to continue to engage TAC members in Conservancy activities in 2002 and beyond.

Also a major part of the Conservancy's year 2002 program of work is the proposed restoration and enhancement effort on three of the Conservancy's preserves in Sutter County. Planning, permitting, coordination with the many interested parties, managing the bidding for contractors, contractor management and compliance monitoring with the NBHCP will be major activities in this effort. The summer 2002 restoration and enhancement project will be as challenging as was the 2001 effort. Since the Conservancy planned the 2001 project to be an early, learning effort, the Conservancy has been able to streamline the process used to complete this type of work. The Conservancy is confident it can use its successful 2001 restoration and enhancement construction experience to successfully complete this coming year's effort.

Since Metro Air Park has received an Incidental Take Permit, the Conservancy will also continue its commitment to serve as "plan operator" for this project, similar to its effort as plan operator for the City of Sacramento's NBHCP. Additionally, Sutter County is beginning to introduce projects into the Natomas Basin and participate in the development of a new NBHCP, and considerable Conservancy efforts in this regard are likely to occupy a good deal of the Conservancy's attention in 2002.

In both efforts, in addition to looking out after the Conservancy's ability to implement the NBHCP, it is anticipated the Conservancy will have a considerable role in adding new mitigation acreage to its fast-growing inventory.

For the year 2002, activity will center around:

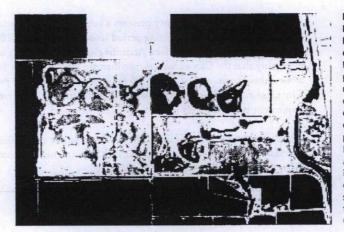
- remaining on an aggressive compliance track so that timely reports are submitted as required by the NBHCP and IA,
- 2. managing acquired mitigation lands for the recovery of the covered species,
- 3. purchasing or accepting additional mitigation land as required and needed,
- continuing to complete species monitoring projects for the Swainson's hawk and giant garter snake, and
- appropriately managing newly-created restoration and enhancement projects (specifically, the Betts-Kismat-Silva refuge 2001 project) and constructing a new such project, as will be experienced in 2002 on five additional Conservancy reserves.

7. A description of the habitat enhancement activities conducted in the previous year and those proposed for the coming year.

A discussion on enhancement activities conducted the previous year has been incorporated into several items above. Proposed habitat enhancement work can be found in item (6) above as well as the revised site-specific land management plan (see Appendix D). The Conservancy is experiencing an intensive amount of such work given the rapid acquisition of mitigation lands over the course of the past three years.

 A report of any scientific research authorized or conducted in the previous calendar year on Conservancy Lands other than research conducted directly by USFWS or CDFG, and a description of any research proposed for the coming year.

See item section 6 (k) above.



**Betts-Kismat-Silva** Restoration and **Enhancement** construction project, December 2001. Aerial photo showing restoration and enhancement construction completed. Vegetation planting beginning. Note sinuous marsh areas and basking islands for the benefit of the giant garter snake. Photo: CalAero for The Natomas Basin Conservancy.

A minor research effort involved studying the volume of water that will be maintained in the water structures on the BKS restoration and enhancement project. That report can be found in Appendix C. Water quality research and monitoring conducted as part of the BKS restoration and enhancement project during 2001 can be found in Appendix K.

Research planned for 2002 falls primarily into monitoring efforts, including a.) monitoring for the giant garter snake, and 2.) monitoring for the Swainson's hawk.

 An itemization, if known, of the number of individuals of the Covered Species taken by the Conservancy in the course of management, relocation, or scientific study, and the disposition of those individuals.

The Conservancy did not take any of the covered species and is unaware of any that were taken by others. However, the City of Sacramento's report on development (Appendix A) is helpful in determining location of habitat disturbed.

10. A yearly financial report prepared by a certified public accountant which provides: a tabulation of all Habitat Acquisition Fees and other Mitigation Fees collected by the Conservancy; all other sources of income to the Conservancy; all expenses incurred by the Conservancy during the previous year, including an itemization of all expenses incurred in land acquisition activities; the amount of funds held in reserve for future acquisitions; and the value of the endowment fund established from Endowment Fees.

In Appendix I, a financial statement for the Fiscal Year ended December 31, 2001 is presented. Audited financial statements are prepared each year and are generally available around April 1.

11. An assessment of the adequacy of funding projected for the coming year and a recommendation as to the amount that the Base Mitigation Fee should be increased or decreased as specified in Sections 4.5.7, 4.5.8, or 4.5.9 of this Agreement.

In Appendix J, the Conservancy presents a summary of the financial model update it requisitioned during the reporting period (completed May 29, 2001). The model indicated a need for an increase in HCP fees. Accordingly, the Conservancy adopted a resolution<sup>5</sup> requesting that the City of Sacramento increase HCP fees from \$3,941.00 to \$5,993.00 with a "settlement premium" of \$4,028.00 for a total of \$10,021.00 per acre. The Sacramento City Council voted unanimously soon thereafter to accept this recommendation and implement it immediately.

The pattern and process for evaluating the need for fee adjustments, and then getting all the necessary authorizations to implement such adjustments, has become well established. A history of the HCP can be found in Table 5.

TABLE 5 HCP FEE HISTORY

YEAR	ESTABLISHED FEE
1997	\$2,240
1998	\$2,656
1999	\$3,292
2000	\$3,942
2001	\$5,993 + \$4,028 premium = \$10,021 *

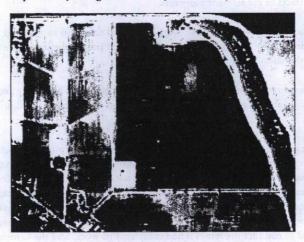
<sup>\*</sup>HCP "premium" was established as a result of the litigation settled during the reporting year. A premium was established due to the limited geographic nature of permitted mitigation land acquisition. The premium was expected to be dropped upon the conclusion of the settlement period, October 2002.

#### 12. Maps depicting items set forth under paragraphs (1), (2), (3), (4), and (5) above.

In Appendix A, the Conservancy provides maps of fees paid as presented by the City of Sacramento. In Appendix B, a map of Conservancy mitigation lands is provided. In addition, the Conservancy has completed land surveys of all acquired mitigation lands. The surveys conform to American Land Title Association (ALTA) requirements and are available in the Conservancy's office.

<sup>5</sup> Conservancy Board of Directors resolution #06.01.04 adopted by unanimous vote June 6, 2001.

Additionally, a map was prepared (see Appendix C) to show water connectivity between the Conservancy's mitigation land holdings. This was prompted by the numerous questions raised in the above-referenced litigation about the hydrologic connectivity of the Conservancy's preserves. As Conservancy preserves are added, the map will be updated to reflect these acquisitions. That way, an unfolding illustration will demonstrate clearly this important hydrologic connectivity.



Aerial Photos of All
Conservancy Lands Have
Been Taken. The Conservancy
has had aerial photos taken
of all of its mitigation land.
The photo at right shows the
Conservancy's Souza (left) and
Natomas Farms (right) tracts
in Sacramento County, both
acquired in 2001. Note
Fisherman's Lake on the
easterly border of the
property. July 2001. Photo:
Cal Aero Photo for The
Natomas Basin Conservancy.

## 13. Copies of all data collected and reports generated as a result of scientific research conducted on Conservancy Lands.

Reports covering such work conducted during 2001, including, a.) monitoring for the giant garter snake, 2.) monitoring for the Swainson's hawk, 3.) geophysical testing on the Conservancy's Betts-Kismat-Silva tracts and Lucich North and Frazer tracts, and 4.) phase one environmental reports for newly acquired mitigation land. Geophysical testing reports are found in Appendix E. The monitoring report for the giant garter snake can be found in Appendix F. Appendix G contains the Swainson's hawk monitoring report for 2001. Phase one environmental reports for the two properties acquired in 2001 can be found in Appendix H.

ALTA surveys of newly acquired mitigation land were also completed and are on file with the Conservancy at its office.

#### 14. An accounting of the long-term endowment account.

An accounting of the Conservancy's Endowment Fund can be found in Appendix I along with the financial statement of the organization.

#### 15. All other information described in Chapter IV, Section G.4 of the NBHCP.

See item number (6) above for a complete list of information listed in the HCP.

Other management activity included occasional meetings or communications with adjacent and neighboring land owners to update them with the Conservancy's program and to discuss any other issues related to the land management activities going on in an around the Conservancy's mitigation lands.

A large number of general property management activities were also engaged in during the year. The Conservancy continues to install locks on all access gates on Conservancy mitigation land. It also controlled trespassing and hunting on such lands as well. Property tax management has taken a considerable amount of the Conservancy's time, as has managing the participation by the Conservancy in federal farming programs, working regularly with the U.S.D.A.'s Farm Services Agency in Yuba City, California to preserve eligibility of Conservancy farming tracts in the relevant programs.

The Conservancy also moved to remove illegally dumped debris on and around Conservancyowned properties. This activity seems to be taking greater time and effort as the amount of Conservancy mitigation land grows.

Additional efforts in managing rental housing, repairing electrical, plumbing and HVAC in the rental housing, and locating signage and gates around these areas took additional staff effort.

Last in this category, is the Conservancy effort to remove an old, unsound structure from its Silva tract. Concerned mostly about unauthorized human use of the structure and the possibility of inadvertent injury resulting from such use, the Conservancy entered into a contract to remove the structure from the tract. It was discovered that the structure contained asbestos, and the task of accounting for the extent of this asbestos, then coordinating its safe removal, consumed a considerable amount of Conservancy staff time. An asbestos abatement contractor hired to conduct the removal had completed its work, and the Conservancy engaged another contractor to certify the site was cleared.

## II. NATOMAS BASIN HABITAT CONSERVATION PLAN SECTION IV.G.3

Accounting for each jurisdiction (City of Sacramento, Sacramento County, and Sutter County):

- 1. Take: The annual incremental and cumulative area converted to urban development:
  - a. In the applicable permit area and entire NBHCP area.
  - b. In the Swainson's hawk zone (the area within 1 mile of the Sacramento River).
  - c. In vernal pools.

The Conservancy provides information from the City in this regard in Appendix A which follows.

- 2. Mitigation: The annual incremental and cumulative area of mitigation lands acquired:
  - a. In-Basin:
    - i. Lands managed as marsh.
    - ii. Lands managed as rice, including associated fallow land.
    - iii. Lands managed as upland reserves.
  - b. Out-of-Basin in Area "B."
  - c. Out-of-Basin in Area "C."
  - d. Status of the initial 400 acres (when purchased and what habitat type).
  - e. Mitigation for vernal pools, as appropriate.

Please refer to Section I (3) above for a response to "a." See also Section III (2) and Table 4.

As to "b," no lands have been acquired in Area B.

As to "c," no lands have been acquired in Area C.

As to "d," the initial 400 acres were acquired on May 18, 1999 with the acquisition of the South Sutter Ventures Group properties. At present, the habitat type is a mix of upland reserve for the 338-acre Betts-Kismat-Silva tract with a large percentage of this tract converted (or restored) to managed marsh. The Souza tract is classified as upland reserve, at least until such time as a revised and updated site-specific land management plan can establish its use. All other mitigation lands are presently in rice production. For long term planned uses, refer to the site-specific land management plan for 2001 (see Appendix D).

As to "e," there are suspected vernal pools on the Silva tract, and these have been enhanced and further developed under the 2001 restoration and enhancement project on the site.

- 3. Financial status:
  - a. The amount and source of funds collected.
  - b. Funds expended or committed for acquisition.
  - c. Funds held in reserve.
  - d. Summary of expenditures for and revenues from reserve land management.
  - e. An accounting of the long-term endowment account.

An entire accounting and response to this section can be found in Appendix I.

## III. NATOMAS BASIN HABITAT CONSERVATION PLAN SECTION IV.G.4

 The amount and location of all lands approved for urban development by public agencies (e.g., public works projects) for which mitigation fees were paid to the NBC in the preceding year.

Please see the schedule of the amount of all lands for which mitigation fees were paid in Appendix A. A map showing the location of such land from the City of Sacramento is also included.

2. A description of the locations and condition of any mitigation lands acquired in fee simple or conservation easement in the preceding year.

A record of all lands acquired by the Conservancy by size and date of acquisition can be found in Table 2, page 2, titled, The Natomas Basin Conservancy, Land Acquisition Tally. A quick reference guide to all Conservancy preserves can be found in Table 4, Reserve Characteristics Illustration, below. General descriptions for the properties acquired during the preceding year follow. Descriptions describe the property at the time of acquisition:

Souza tract. This 44.68-acre parcel is immediately adjacent to the Conservancy's Natomas Farms tract (see below) which lies along Fisherman's Lake. The Souza tract is bounded on the north by Del Paso Road, and on the south by Garden Highway and the Sacramento River. At its southernmost tip, it is heavily populated with trees, and given its proximity to the Sacramento River, lies squarely in the "Swainson's hawk zone" established by the City of Sacramento and others. It is a long, north-south property, approximately 3,067 feet by 660 feet. Along Garden Highway, the property contains a single family residence and several farm buildings. As a term and condition of sale, the seller of the property reserved the right to obtain a separate parcel from the County of Sacramento for the southerly 3.68 acres and purchase it from the Conservancy. This option must be exercised within 24 months of close of escrow.

The Souza tract has Sacramento County tax assessor number 225-0090-005. It has historically been planted to row crops, most recently to tomatoes. It is provided water by the Natomas Central Mutual Water Company.

Natomas Farms tract. The Conservancy's Natomas Farms tract lies adjacent to Fisherman's Lake, and is also adjacent to the Conservancy's Souza tract (see above). It is 96.46 acres in size, and is irregular in shape. It lies approximately 4.5 miles northwest of downtown Sacramento and approximately 1.5 miles west of U.S. Highway 99/Interstate 5. It also lies approximately two miles southeast of the entrance to Sacramento International Airport. The property is bounded on the north by Del Paso Road and several residences. On the south, it is bounded by another farm, one that produces mostly rice each year.

The Natomas Farms tract has Sacramento County tax assessor number 225-0090-062. It was purchased by the Conservancy on July 9, 2001. Combined with the above-referenced Souza tract, there are 141.14 acres at this site.

To the east is Fisherman's Lake and documented Swainson's hawk nests, and nests also exist to the west of the property along the Sacramento River. Several trees line the southern boundary to the property. Giant garter snakes have also been well documented in and around Fisherman's Lake.

For many years the property has been in rice production, and that is its current land use. It is provided water service by the Natomas Central Mutual Water Company.

TABLE 6
THE NATOMAS BASIN CONSERVANCY
RESERVE CHARACTERISTICS ILLUSTRATION\*

ment you with gullariol day gold	MITIGATION LAND TRACTS IN ORDER OF ACQUIRED DATE										
characteristic		Betts	Kismat	North	a things	Lucich North	Lucich South	Brennan	Frazer	Souza**	Natomas Farms**
COUNTY	i desperti	no	1	pale	odi	of a	14				
Sacramento		•	•	Apr.	(th)	N. P. G	SHI			•	•
Sutter	0	0		•	•	•	•	•	•		
PLANNED LAND USE	os oslenh	nac.	QLS	- Nic	Eini	de	Co	di			
Rice	amb de	5.0	division in	•	•	n l	•	position.			
Upland	abet •	•	•	460	•	0	211	•	0	•	T.
Marsh		•	•	0	•	•	0	0	•		
WATER	Lastr mg	bole		Tij)	101	erge	4	eg.			
Natomas Water Co.	A Designation	winds.	SOL	•		•	•	hat		•	
Ground Water	Ba .	•	ire	are f	113	File.	200	•			
Surface Water	•	•	•	3 2	Niles!	02.2	i na	107			
MANAGEMENT PLAN	miga/tim	DON	000		un	141		C EII			
Covered by 2001 Plan	1	1	1	1	1	1	1	1	1		
Not yet covered									18	•	
Marsh Construction-2001	1	1	1	DEM	13.1	eng		12			
Marsh Construction-2002	and rate	1111	326	•	•	100	•	H			
EXISTING TREES	Proportion			6.5	200	No.	0770	TER			
1 0 Land ber 1005 ei lenimoes	risves di a		ma	•	•	•	•	SBU	•		_
1 – 10			•			8	m E	7.15			
11 – 30								•		•	
31+	noi •	•	0.57	100	03	30	THE P	ST			
OTHER	V 20 103	110	976	100	ber		100	g w			
Fenced	•	•	•	900	mi a	61		107			
Active Cattle Grazing		•	•								
Residential Structure(s)	•	•			1						
Agricultural Structure(s)		•								•	
Vernal pools	1	1.4		See al							

<sup>\*</sup> Solid dot (●) represents inclusion of characteristic on that tract; hollowed-out dot (○) represents minor or partial inclusion on the referenced tract; a check mark (✔) represents completion of project.

<sup>\*\*</sup> Since no site-specific land management plan yet exists for the Conservancy's Natomas Farms and Souza mitigation tracts, the "planned land use" designation in this illustration for these tracts are actually "anticipated" land uses and have not received required approvals.

An aerial photograph of the properties acquired during the 2001 reporting period can be found above between sections 12 and 13.

An accounting of the taking of any individual giant garter snakes, Swainson's
hawks, or other covered species, if known, as a result of activities in the City's or
Counties' permit areas in the preceding year, including any specimens taken for
scientific purposes.

The Conservancy did not take any individual species during the reporting year, and is unaware of any species taken by others. However, take that resulted from development in the City of Sacramento is mapped in Appendix A.

4. Plans for the acquisition of reserve lands in fee simple or conservation easement in the forthcoming year.

The Conservancy plans to continue to acquire properties, either in fee simple form or by easement in the coming year. At the time this report was filed, the Conservancy had already acquired an additional 317 acres of land and may not require additional land in 2002 to meet mitigation criteria. However, should development occur with any intensity in 2002, additional properties will be needed, and the Conservancy is working to tie up additional mitigation land in anticipation of any such need. In all cases, the Conservancy is attempting to consolidate the larger mitigation land holdings into contiguous blocks. The Conservancy continues to believe that assembling the single 2,500-acre contiguous mitigation land block as well as the multiple 400-acre minimum contiguous blocks is achievable, and probably well ahead of schedule.

It is also possible the City of Sacramento may acquire an additional 114 acres or more around Fisherman's Lake as a part of its effort to comply with the terms of the litigation settlement agreement discussed earlier. These properties would be adjacent or nearby the Conservancy's Souza and Natomas Farms tracts that were acquired in 2001 and which lie adjacent to Fisherman's Lake.

The aim of the Conservancy's mitigation land acquisition program is to continue to attempt to assemble land necessary to meet the 2,500-acre contiguous land requirement, along with smaller parcels in 400-acre blocks.

An outline of habitat management, enhancement, and monitoring activities conducted in the preceding year and planned activities and goals for the forthcoming year.

Please see I.6 above for a full discussion of this subject.

Pertinent results of biological surveys and monitoring activities conducted in the preceding year.

Please refer to Appendices F and G for a complete reporting on this issue.

 Pertinent information from RD1000 and NCMWC as described in Section C.1.e above (Reporting/Revisions).

Reports from RD 1000 and Natomas Mutual Water Company follow in Appendix L.

8. Any other pertinent information regarding implementation by the permittees of the terms of the NBHCP and its associated permits or circumstances within the reserve system specifically or the plan area generally.

The Conservancy continues to serve as a reference for those planning a revised NBHCP. Parties involved in this activity include the City of Sacramento, County of Sutter, Natomas Central Mutual Water Company and Reclamation District 1000.

Since Metro Air Park has received its Incidental Take Permit, the Conservancy will serve as plan operator for this plan as well. The Conservancy also has served as a reference for this project as well. In both cases, the Conservancy left policy issues to the applicants. The Conservancy's role was confined to providing information about the implementation and operation of the HCP.

As further indications of Conservancy activities during the reporting year, copies of extracts of the adopted minutes of all Conservancy Board of Directors meetings can be found in Appendix M.

#### IV. Annual Work Plan Section IV.D.1

The work plan for the Conservancy's year 2001 effort can be found i "Management activities for the coming year."



Cluster of Trees Planted.
Several native species trees were planted during 2001 in an area known as the "Tretheway Grove." The trees are cared for by Conservancy staff and lie at the south end of the former Silva dairy. Photo: The Natomas Basin Conservancy.

#### TABLE OF APPENDICES

Appendix A: Report from the City of Sacramento

Appendix B: Map of Mitigation Land Acquired To Date

Appendix C: Water Connectivity Map and BKS Water Volume Assessment

Appendix D: Site-Specific Land Management Plan

Appendix E: Geophysical Reports and Studies on Conservancy Land

Appendix F: Giant Garter Snake Monitoring Report, 2001

Appendix G: Swainson's Hawk Monitoring Report, 2001

Appendix H: Phase One Environmental Reports for Mitigation Land Acquisitions

in 2001

Appendix I: Financial Statement

Appendix J: Economic Planning Systems Finance Model Update

Appendix K: Hydrology Analysis (Surface Water Sampling and Monitoring)

Appendix L: Reports from Reclamation District 1000 and Natomas Mutual

Water Company

Appendix M: Minutes Recap of the Board of Directors Meetings, The Natomas

Basin Conservancy

#### GLOSSARY AND ABBREVIATIONS

Annual Report

The Implementation Annual Report. The Conservancy is required under Section 5.2 of the Implementation Agreement and Section IV.G.4 of the Natomas Basin Habitat Conservation Plan to produce and deliver an implementation annual report no later than 60 days after the close of the calendar year. Items to be included in the report are specifically prescribed.

**CDFG** 

California Department of Fish and Game

Conservancy

The Natomas Basin Conservancy. A California non-profit public benefit corporation serving as "plan operator" of the Natomas Basin Habitat Conservation Plan.

Giant garter snake (Thamnophis gigas) The giant garter snake is one of the largest garter snakes of the genus Thamnophis, with a total length up to 4.5 feet or greater. The garter snake in the Sacramento Valley and Delta regions has a dorsal ground color often dark brown to olive or nearly black, a complete dorsal strip varying in color from dull yellow to bright orange, and often orange on the ventral surfaces as well. Officially listed as a "threatened" species under federal and state authority, it is one of the two primary species protected under the NBHCP.

IA

The Natomas Basin Habitat Conservation Plan Implementation Agreement. (See NBHCP)

MAPPOA

Metro Air Park Property Owners Association.

NBHCP

Natomas Basin Habitat Conservation Plan. The NBHCP applies to the 53,341-acre interior of the Natomas Basin, located in the northern portion of Sacramento County and the southern portion of Sutter County. The Basin contains incorporated and unincorporated areas within the jurisdiction of the City of Sacramento, Sacramento County and Sutter County. The purpose of the NBHCP is to promote biological conservation along with economic development and the continuation of agriculture within the Natomas Basin. The NBHCP establishes a multi-species conservation program to mitigate the expected loss of habitat values and incidental take of protected species that would result from urban development, operation of irrigation and drainage systems, and rice farming. The goal of the NBHCP is to preserve, restore, and enhance habitat values found in the Natomas Basin while allowing urban development to proceed according to local land use plans. The NBHCP is a supporting document for federal Section 10(a)(1)(B) and State Section 2081 permit applications. Section 10(a)(1)(B) of the federal Endangered Species Act allows incidental take of endangered or threatened species subject to its permit requirements. Similarly, State Section 2081 of the California Fish and Game Code allows the California Department of Fish and Game to enter into management agreements that allows activities which may otherwise result in habitat loss or take of individuals of a state listed species.

Managed marsh

Seasonal or perennial wetland managed for habitat values for the giant garter snake, a federally protected species, and other covered species. Such land must meet minimum requirements as described in the NBHCP which include, but are not limited to, an assured water supply that will serve the marsh from April through September of each year. The marsh

will be a combination of open water, land with wetland vegetation, and other upland areas and may include a buffer area at the periphery. The Conservancy must develop detailed management plans pursuant to Chapter IV, Sections C.1 and D of the NBHCP for those Conservancy lands designated as managed marsh, in coordination with and subject to the approval of the CDFG and USFWS.

Permit

Or, incidental take permit. A permit issued by the USFWS under Section 10 (a)(1)(B) of the federal Endangered Species Act which authorizes the incidental take of a covered species which may occur as a result of urban development, rice farming and management activities with the permit area. Permit may also be used to collectively refer to Section 10 (a)(1)(B) permit, and the Section 2081, management authorization, of the State of California.

**RD 1000** 

Reclamation District 1000.

Swainson's hawk

(Buteo swainsoni) The state-listed threatened Swainson's hawk is a medium sized buteo (25 to 35 ounces) and is distinguished from other buteos by long, narrow, pointed wings. Swainson's hawk plumage varies greatly. Light phase birds have buff white wing linings with darkly barred brown flight feathers; dark phase birds are dark brown with white undertail coverts, and intermediate reddish plumage occurs between phases.

TAC

Technical Advisory Committee. The TAC consists of six members, two each appointed from the City of Sacramento, the California Department of Fish and Game and the U.S. Fish and Wildlife Service.

USGS/BRD

United States Geological Service, Biological Resource Division. The Conservancy works with the Dixon, California office of USGS/BRD on giant garter snake matters.

USFWS

United States Fish and Wildlife Service.

Water Company

The Natomas Central Mutual Water Company is the purveyor of water to the Conservancy's Lucich North, Lucich South, Bennett North and Bennett South tracts. The Conservancy owns 620 shares (combined Lucich North and Lucich South) and 358 shares (combined Bennett North and Bennett South tracts) of stock (total 978 shares) in the Water Company. The shares were officially conveyed by the Board of Directors of the Water Company to the Conservancy on July 13, 1999.

property balls for went do not be a selected by the property of the selected by the selected b

of the addingstrated as a second of the addingstrated as a second

WHITTEN

Section 1

Dali Dali

" helikatasa.

3955

graph Bay W

....

The Natomas Basin Conservancy
 1750 Creekside Oaks Dr., Suite
 290 Sacramento, CA 95833

Phone: 916.649.3331 FAX: 916.649.3322

NAT OMAS
BASIN
Conservancy

## IMPLEMENTATION ANNUAL REPORT

CALENDAR YEAR 201
MARCH 1, 2003

Introduction
Table of Contents
List of Tables
Highlights
IA Section 5.2
NBHCP Section IV.G.3
NBHCP Section IV.G.4
NBHCP Section IV.D.1
Table of Appendices
Glossary and Abbreviations

© The Natomas Basin Conservancy 2003

0

### INTRODUCTION

This report responds to a requirement of the Natomas Basin Habitat Conservation Plan (Section IV.G.4) and the Implementation Agreement (Section 5.2) which calls for an implementation annual report. The report is due within 60 days after the close of each calendar year.

This is the fourth full-year annual report prepared by the Conservancy. As additional accomplishments of the Conservancy accumulate and responsibilities expand with the growth of mitigation acreage, more information will be available in future annual reports.

The goal of the presentation style of this report is to follow the reporting requirements of the Natomas Basin Habitat Conservation Plan and Implementation Agreement. Since reporting compliance is a key element in the operations of the Conservancy, this format should be helpful to the reader in assuring all reporting requirements are fulfilled.

The Conservancy is pleased to present this report and to share the many positive steps it has taken towards successful implementation of the Natomas Basin Habitat Conservation Plan.

Those wanting further information may contact the Conservancy at:

THE NATOMAS BASIN CONSERVANCY 1750 Creekside Oaks Drive, Suite 290 Sacramento, CA 95833 Telephone: 916.649.3331 FAX: 916.649.3322 www.natomasbasin.org

#### SPECIAL NOTE

This version of the 2002 Implementation Annual Report contains only the main body of the report itself, and appendices are not provided. Copies of the appendices (see "Table of Appendices" in this report) are available from the Conservancy for public viewing should they be needed. Also, although this version is nearly identical to the official "record" version, there

are slight variances (see especially I.6.b, "Suitable agricultural practices" notes regarding Swainson's hawk). It is intended to provide a more readable and cost-effective presentation of the 2002 Implementation Annual Report. Those wishing copies of the appendices and official record version may obtain them for normal copying charges.



Swainson's hawk (Buteo swainsoni)

### TABLE OF CONTENTS

Introduction	i
Table of Contents	ii
List of Tables and Figures	iii
Highlights of the 2002 Implementation Annual Report	iv
I. Implementation Agreement Section 5.2	
1. The number of acres of land approved for development	1
2. An estimate of the amount of land graded	1
3. The aggregate number of acres acquired or encumbered	1
4. A description of any land conveyed to others	4
5. A summary of the aggregate number of acres owned in fee with managed marsh	4
6. A description of management activities	4
7. A description of habitat enhancement activities	13
8. A report on scientific research authorized or conducted	13
9. An itemization of the number of individuals of covered species taken	13
10. A yearly financial report	14
11. An assessment of the adequacy of funding	14
12. Maps	15
13. Copies of data collected and reports generated	15
14. An accounting of the endowment fund	16
15. Other information	16
II. Natomas Basin Habitat Conservation Plan, Section IV.G.3	
1. Area converted to urban development	18
2. Mitigation land accounting	18
3. Financial status	19
III. Natomas Basin Habitat Conservation Plan, Section IV.G.4	
1. Amount and location of lands approved for urban development	20
2. A description of mitigation lands	20
3. An accounting of any taking activity	22
4. Plans for acquisition of mitigation lands	23
5. An outline of habitat management, enhancement and monitoring	23
6. Pertinent results of surveys and monitoring	23
7. Pertinent information from RD 1000 and Natomas Mutual Water Company	23
8. Other pertinent information	23
IV. Natomas Basin Habitat Conservation Plan, Section IV.D.1	24
Table of Appendices	25
Glossary and Abbreviations	26

### LIST OF TABLES

Table 1,	HCP Fee-Paid Acres	1
Table 2,	Land Acquisition Tally	
Table 3,	Managed Marsh/Rice/Uplands Tally	3
Table 4,	Native Trees and Shrubs Planted in 2002 on Conservancy Preserves	
Table 5,	Native Trees Planted on Conservancy Preserves as a Part of Restoration and Enhancement Activities	9
Table 6,	HCP Fee History	14
Table 7,	Reserve Characteristics Illustration	21



Giant garter snake (Thamnophis gigas)

# LIST OF FIGURES

Figure 1,	Summer 2002 Restoration and Enhancement Construction	4
Figure 2,	Acquisitions Continue in the Swainson's Hawk Zone	12
Figure 3,	Aerial Photos of All Conservancy Lands Have Been Taken	15
Figure 4,	Management Responsibilities Grow	16
Figure 5,	New Conservancy Brochure Features Completed Restoration and Enhancement Construction Project	17
Figure 6,	Bennett South Restoration and Enhancement Construction Project	19
Figure 7,	Strategically Acquired Mitigation Land	22
Figure 8.	Conservancy Web Site Established and Head in 2002	24

#### Acquisition

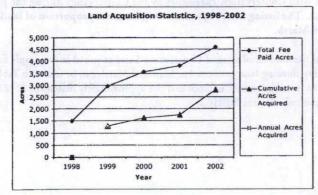
- ☐ The Conservancy acquired four (4) farms totaling 1,010.014 acres in 2002. This brings the total number of farms acquired to date to fifteen (15).
- ☐ The total acres of land acquired has grown to 2,802.6511.
- Phase One environmental reports, American Land Title Association (ALTA) land surveys and aerial photographs were completed on each of the Conservancy's land acquisitions.

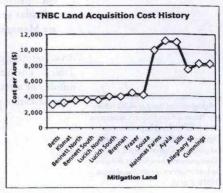
#### PROGRAMMATIC

- The Conservancy continues preparing required site-specific management plans as additional acreage is acquired.
- A Swainson's hawk monitoring report and giant garter snake monitoring report were conducted.
- The Conservancy issued a timely implementation annual report, budget, financial audit and all other required reporting documents during the year.
- ☐ Staff worked with the City of Sacramento and Sutter County on operational aspects of a draft revised NBHCP and the Metro Air Park Property Owners' Association to facilitate its need for a Plan Operator.
- Restoration and enhancement construction projects were officially completed on the Betts, Kismat and Silva tracts. Similar projects were nearly completed on the Lucich South, Bennett North and Bennett South tracts.

#### BUDGET AND FINANCE

- The long-term finance model was updated and a fee increase was requested, granted and implemented.
- The Conservancy's endowment fund account continues to grow, and remains conservatively invested in order to insure its long-term viability.





# THE NATOMAS BASIN CONSERVANCY

### ANNUAL REPORT 20021

- I. IMPLEMENTATION AGREEMENT SECTION 5.2
- The number of acres of land within the Permit Area approved for Urban Development during the previous calendar year for which fees were collected.

During 2002, the number of acres of land within the permit area for which fees have been paid was 777.81. A full report on the number of acres permitted for urban development can be found in Appendix A. A report from the City of Sacramento's Accounting Department shows a schedule of acres for the covered period for which fees have been paid. The mitigation acreage is also mapped, and these maps can also be found in Appendix B.

TABLE I
THE NATOMAS BASIN CONSERVANCY
HCP FEE-PAID ACRES

_	NENIAN	
_	PERIOD	HCP FEE PAID ACRES*
	Through December 31, 1998	1,515.66
	January 1-December 31, 1999	1,465.47
	January 1-December 31, 2000	598.07
	January 1-December 31, 2001	242.09
	January 1-December 31, 2002	777.81
	All years through December 31, 2002	4,599.11

<sup>\*</sup>Some acres were donated in lieu of paying the Acquisition Fund portion of the NBHCP fee.

An estimate of the amount of land within the Permit Area actually grubbed or graded for Urban Development during the previous calendar year.

This City of Sacramento-provided information can be found along with the maps and related material in Appendix A.

The aggregate number of acres of Conservancy Land acquired in fee simple or
encumbered with Conservation Easements by the Conservancy during the previous
calendar year. The listing shall show the acreage and the proportion of lands which
are Managed Marsh.

An accounting of the number of acres of Conservancy Land acquired in fee simple follows in Table 2. The listing showing land converted to Managed Marsh can be found in Table 3. The number of acres in managed marsh, uplands and rice approximately match the 25/25/50 acres allocation prescribed in the NBHCP.

Highlighted text (bold or italics) follows the Natornas Basin Habitat Conservation Plan (NBHCP) and Implementation Agreement (IA) reporting requirements or guidelines. One exception is that illustrations may have headers and titles in bold which are not designated in the NBHCP or IA.

All Conservancy land acquired to date has been by fee simple acquisition, although at year's end, a conservation easement for a small amount of land owned by Reclamation District 1000 was in the process of being completed. This conservation easement was necessitated by restoration and enhancement construction on adjacent land. At the end of 2002, the Conservancy had nearly completed its second year of managed marsh construction and was well on the way to conducting additional such conversions during 2003.

TABLE 2
THE NATOMAS BASIN CONSERVANCY
LAND ACQUISITION TALLY THROUGH 12.31.02

THE RESERVE THE		PROPERTY	DATE ACQUIRED	ACRES
95170	PART	Silva	1.7.99	159.200
		Betts	4.5.99	138.992
		Kismat	4.16.99	40.293
		Bennett (C.L.)	5.17.99	226.675
		Bennett (H&B)	5.17.99	132.486
		Lucich North*	5.18.99	267.986
		Lucich South	5.18.99	351.889
		Brennan	6.15.00	241.376
		Frazer	7.31.00	92.600
		Souza**	7.2.01	44.680
		Natomas Farms	7.9.01	96.460
		Ayala	2.20.02	317.3674
		Sills	7.15.02	575.5559
The Interest of		Alleghany 50	11.7.02	50.2601
		Cummings	11.7.02	66.8307
		Total		2,802.6511

<sup>\*</sup> Lucich North may be reduced 20.68 acres pending negotiations between the seller (Lucich) and SAFCA. The Lucich tracts are also sometimes referred to as the South Sutter Venture Group tracts.

The Conservancy adopted additions to its site-specific management plan (see Appendix I) during 2002 as additional mitigation lands were acquired. On April 3, 2002 the Board adopted resolution #04.02.02 for summer 2002 restoration and enhancement construction in the amount of \$235,354.00, largely for managed marsh construction. This covered the Bennett South, Bennett North and Lucich South reserves. On May 1, 2002, the Board adopted resolution #05.02.09 authorizing \$21,515.00 for a construction management contract for these restoration and enhancement construction projects.

For the future, the Conservancy's Board adopted resolution #06.02.02 on June 5, 2002 in the amount of \$5,600.00 to supplement the prior contract for the preparation of construction drawings and bid package preparation for the summer 2003 restoration and enhancement construction projects. The Lucich North tract and Frazer tract will both be dominated by managed marsh complex once construction is completed.

<sup>\*\*</sup> Agreement of Purchase and Sale includes an option whereby 3.68 acres can be purchased back from the Conservancy.

TABLE 3
THE NATOMAS BASIN CONSERVANCY
MANAGED MARSH/RICE/UPLAND TALLY

20 K. galinik 20	surveyed	managed marsh <sup>1</sup>	managed marsh¹			total of 3
Tracts	acres	planned	completed	rice	upland	uses
2001 Construction						
Betts/Kismat/Silva	338.49	192.51	192.51	0.00	145.98	338.49
Brennan <sup>3</sup>	241.38	3.86	3.86	0.00	237.52	· 241.38
2002 Construction <sup>4</sup>						
Lucich South <sup>5</sup>	351.89	16.45	16.45	334.00	1.44	351.89
Bennett North <sup>6</sup>	226.68	9.24	9.24	216.93	0.51	226.68
Bennett South	132.49	22.74	22.74	80.70	29.05	132.49
2003 Construction						
Lucich North <sup>7</sup>	267.99	247.31	0.00	0.00	20.68	267.99
Frazer	92.60	92.60	0.00	0.00	0.00	92.60
Natomas Farms	96.46	36.20	0.00	0.00	60.26	96.46
Souza	44.68	0.00	0.00	0.00	44.68	44.68
Not yet scheduled						
Alleghany 50	50.26	0.00	0.00	0.00	50.26	50.26
Cummings	66.83	25.00	0.00	0.00	41.83	66.83
Ayala <sup>8,9</sup>	317.37	20.00	0.00	282.30	15.07	317.37
Sills <sup>8</sup>	575.56	50.00	0.00	490.00	35.56	575.56
Tota	d 2,802.65	715.91	244.80	1,403.93	682.82	2,802.65
		25.54	% 8.73%	50.09%	6 24.36%	

1 Managed marsh includes "associated uplands" as provided for in NBHCP.

<sup>2</sup> Represents managed marsh in approved SSMPs except "Not yet scheduled" section which are projections.

Some restoration and enhancement work remains, but project is largely complete.

<sup>4</sup> 2002 projects were approximately 95 percent completed at December 31, 2002; awaited dry weather for completion.

<sup>5</sup> Lucich South managed marsh acreage does not include planned 4.6352-acre conservation easement.

6 Bennett North managed marsh acreage does not include planned 1.1227-acre conservation easement.

Lucich North surveyed acres @ 267.986 less 20.68 probably conveyed to SAFCA; would reduce total to 247.3060.

Expect these rice fields will include significant fallowing which will afford certain upland benefits.

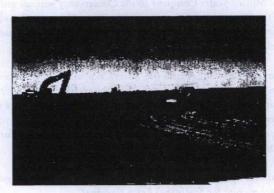
9 At conclusion of 2002, this tract was entirely surplus mitigation.

Additionally, on August 7, 2002, the Board adopted resolution #08.02.05 for the preparation of a site specific management plan (SSMP) for the Alleghany 50, Ayala and Sills tracts. On November 6, 2002 (resolution #11.02.02) the Board approved a SSMP for Souza and Natomas Farms, setting the way for managed marsh construction in 2003. On November 6, 2002, in resolution #11.02.08, the Conservancy's Board of Directors approved a contract that would prepare a SSMP on the Cummings tract, and on December 4, 2002, (resolution #12.02.02), authorized a contract to prepare construction drawings and bid package for the Natomas Farms and Souza tract managed marsh complex and restoration and enhancement construction in general.

 A description of any lands conveyed by the Conservancy to the USFWS, CDFG, any other governmental entity, and to any other person or entity during the previous year.

The Conservancy has not conveyed any land to the USFWS, CDFG or any other governmental entity.

5. A summary of the total aggregate number of acres of Conservancy Lands owned in fee simple or encumbered with Conservation Easements in favor of the Conservancy as of the end of the previous calendar year. The summary listing shall show the acreage and the proportion of lands which are Managed Marsh.



See discussion in number three (3) above, especially Table 3.

Figure 1. Summer 2002 Restoration and Enhancement construction.
The Conservancy began its second summer of restoration and enhancement construction on three reserves. The photo at left shows managed marsh construction on the Conservancy's Lucich South tract in South Sutter County during 2002. Photo: The Natomas Basin Conservancy.

 A description of the management activities which the Conservancy conducted during the previous year and the management activities proposed for the coming year.

Following the outline in the NBHCP page IV-40 ("Habitat management activities"), the following list is presented:

a. Control of water supply and availability.

The Conservancy's management is well aware that without adequate water supply, the 25 percent managed marsh requirement in the NBHCP would be jeopardized. Moreover, the ability to provide for rice operations would also be at risk, and income from rice operations provides a large share of the revenue necessary for various activities, including maintaining the managed marsh component. Accordingly, great care has been taken by the Conservancy with respect to acquiring and assuring full rights to water supplies as it acquires property for mitigation.

While the Betts-Kismat-Silva tract restoration and enhancement construction is complete, the Conservancy placed considerable efforts in 2002 at improving water supply backup alternatives on the site. The site's primary water supply is high-quality tailwater from a neighboring sturgeon farm. While the Conservancy sees no reason to believe this supply will end, contingencies were built into the restoration and enhancement construction project for the site in the unlikely event anything happened to this water supply. In 2002, following restoration and enhancement construction, work was begun to substantially improve the existing groundwater well on the Betts tract. When completed in 2003, the managed marsh complex on all three properties (Betts, Kismat and Silva) will be further supported with water supply back-up alternatives. Additionally, the ability to continue to effectively irrigate the uplands pasture on the Betts tract will be greatly improved.

Regarding other mitigation land, management has worked to transfer stock in the Natomas Central Mutual Water Company to the Conservancy with all mitigation land acquisitions within the Water Company territory. The Water Company Board of Directors has approved the Conservancy's requests for the transfer of ownership, and stock certificates have been received.

The Conservancy staff attends the Water Company's annual meetings and casts shareholder votes in the Conservancy's interest. The Conservancy owns 2,209 shares of stock in the Water Company. This number represents approximately the number of acres of land owned by the Conservancy in the Water Company's service territory. The Conservancy also continues to explore with Water Company officials opportunities that exist for water provision to those tracts the Conservancy owns which do not hold water rights.<sup>2</sup>

b. Suitable agricultural practices (e.g., rice growing for giant garter snakes and production of other crops for Swainson's hawk foraging).

On all its mitigation land acquisitions, Conservancy management has adjusted agricultural practices to be in line with the NBHCP. This is especially true with respect to maintaining healthy and productive rice farming operations. Conservancy staff regularly talk with rice farmers about farming in ways that are supportive of giant garter snake and Swainson's hawk populations. Much of the specific effort is outlined in the site-specific management plan applicable for the subject site.

More generally, the Conservancy acknowledges the 1997 NBHCP's discussion that rice farming has played a key role in providing refuge and habitat for some of the 26 special status species addressed in the Plan. The most significant value of rice culture to these species is to the giant garter snake (GGS). The NBHCP requires that due to the contribution rice production makes to GGS survival and recovery, approximately 50 percent of all mitigation land acquired by the Conservancy should be committed to rice production.

The Conservancy's rice farming activities add value to the already considerable values found in conventional rice agriculture. Through a number of management practices and initiatives, rice farming on Conservancy land provides enhanced value through the following:

1. Selection of informed, first-rate rice farming contractors. Using its discretion as a private, non-profit corporation, the Conservancy need not worry about getting the cheapest possible farming done. Rather, it can hire top-quality, conservation-minded farmers. This places a tremendous qualitative touch on the Conservancy's rice farming operations. These farmers are

In addition to the Conservancy's Betts, Kismat, Silva tracts, the Brennan tract does not enjoy participation in the Natomas Central Mutual Water Company. Water to the tract is provided from groundwater from two wells on the property.

more likely to take extra steps to fulfill the goals of the NBHCP. They also make recommendations periodically to the Conservancy on how to best accomplish mutual goals. They work with the Conservancy to make the most of the interface between rice farming and managed marsh, as several rice farms discharge prey-rich (for GGS) rice tailwater directly onto the Conservancy's managed marsh areas. All are motivated to accomplish biological goals in support of the NBHCP, where there is little or no incentive to farm in this manner in normal, conventional rice production.

- 2. Grower participation in mortality avoidance and reporting. An unpublished study in the mid-1990s by the California Rice Industry Association determined that the largest mortality of giant garter snakes in the Sacramento Valley's rice production region was from human interaction. Most specifically, it was snake death due to being run over by motor vehicles and field hands seeing a snake and killing it with a shovel, believing it was bad. The Conservancy's farming contractors know this and work to cooperate and be sensitive to snake issues, and this is accomplished through the farmer/contractor selection process (see #1 above) as well as continuing communication and education of the farmer/contractor. Additionally, growers are requested to report to the Conservancy any GGS—dead or alive—they may find in their normal course of farming. This will help the Conservancy with its information base regarding the GGS.
- 3. Lease elements and provisions; adaptability. The Conservancy's leases with rice farming contractors is an excellent tool for achieving compliance with GGS-friendly practices. The leases now provide several provisions that make rice farming throughout the Conservancy's mitigation land holdings more sensitive to GGS safety. These include requirements regarding seeking appropriate balances with respect to rodent control, vegetation management and specific references to farm chemical safety, for example. Most importantly, as more is learned and GGS habitat defined, future leases can be adapted to accommodate new information and thus influence rice farmer activity in the most beneficial manner.
- 4. Conservancy GGS monitoring and identification of sensitive locations. Through the Conservancy's annual monitoring of GGS populations in the Natomas Basin, it now has an excellent handle on the location of these populations. Knowing this, the Conservancy has visited these sites with rice farming contractors and others related to the rice farming enterprises (e.g., Reclamation District personnel) and highlights those areas as sensitive, key localities to be careful around and to report any unusual activity to the Conservancy.
- 5. Fallowing for sustainability and prey diversity. The Conservancy has adopted as a general management practice the fallowing of certain portions of its rice fields. In California rice, back-to-back crops are often planted, and much of the industry plants rice on 100 percent of available land every year. The Conservancy has placed into its Finance Model a 10 percent fallowing factor on its rice fields. (The Conservancy is careful not to fallow in such a manner that any water conveyance structure important to the GGS or other covered species are dried up.) Not only does this fallowing regime provide opportunities to address herbicide, fungicide and insecticide resistance issues, it also is helpful in reducing the volume of pesticide applications (increasing resistance often encourages greater volume usage). Generally, fallowing helps make the 50 percent mitigation land allocated to rice more sustainable over the long term. Moreover, reduction of a monoculture effect can also be helpful in creating a diversity that is expected to benefit the GGS in terms of prey base and health. Most farming operations do not have the economic position to be able to fallow in this manner. The Conservancy does since its goal is species mitigation rather than maximizing economic return on investment.

- 6. Day-to-day operations and land management refinements. The Conservancy's staff, in its management of rice farming contractors, consults with these farmers on a regular basis. Periodically, questions surface regarding agronomic practices. Conservancy staff always recommends the most favorable biological solutions to problems, consistent with the farming contractor's ability to farm in an economic manner. Conventional operators would most likely resolve whatever issue surfaces in the most expeditious manner possible. The Conservancy's practice in this regard even extends to ancillary farming contractors. For example, the Conservancy's management meets with the aerial applicators serving the Natomas Basin and provides education as to sensitive preserves and even uses aerial photos to designate precise locations of all Conservancy preserves.
- 7. Controlled access and conflicting activity separation. One of the components of the NBHCP is to control human access onto preserves. After all, part of the theory of the NBHCP is that as habitat is lost to development, the covered species displaced by this development can take refuge on Conservancy preserves. To allow urban activity on these refuge areas would be to defeat one of the principles of the NBHCP. The Conservancy controls access to its rice fields like no other rice farm landowner in the Natomas Basin. Signage, fencing, gating, patrolling and neighbor communications are all a part of this function. This helps with the reduction of potential for GGS being driven over by vehicles and unknowledgeable people feeling compelled to kill snakes, even though they may be GGS.
- 8. Integrated Pest Management. The Conservancy recommends to its farmers and uses as a reference the University of California Regents' publication, "Integrated Pest Management for Rice, Second Edition" handbook. Integrated Pest Management (IPM) attempts to use the least amount of chemicals and disruptive practices necessary to farm economically. The IPM rice farming principles and protocols are fortified by the research and direction of some of the world's leading rice scientists, many of whom are affiliated with the University of California and the International Rice Research Institute. In sum, adhering to these practices and principles minimizes disruption, improves water quality and creates a more sustainable rice farming environment.

(See subsections "c," "f," and "g" below for additional agricultural practices which support Swainson's hawk.)

#### c. Grazing programs to eliminate weeds or control vegetation.

In order to support Swainson's hawk foraging opportunities and also to comply with the NBHCP's vegetation management guidelines, the Conservancy has in the past relied on cattle grazing and human intervention for vegetation management and weed control. In 2002, the Conservancy supplemented these alternatives with sheep grazing. The sheep proved to be far better at grazing around marsh than cattle and were very helpful in controlling exotic weeds, another requirement in the NBHCP.

To the Conservancy's surprise, the sheep also found ways to retrieve an explosion of water primrose from the Betts, Kismat and Silva marsh complex and devour it. This non-chemical alternative surprised the Conservancy given that sheep tend to avoid water. Both the sheep and the cattle help keep grass and weeds to an appropriate height so that improved Swainson's hawk foraging is facilitated.

Additional substantive vegetation management efforts are proceeding at the Conservancy's Brennan tract. The preserve's ability to provide grazing capabilities is under study, and since a viable Swainson's hawk nesting site is nearby (NB-14), this effort will take a top priority for 2003 and beyond.

#### d. Exotic species control.

The most serious weed threat is an exotic species of weed, thistle. Bull thistle and western star thistle are the most prominent. Consistent with the site-specific management plans, the Conservancy has moved to control all exotic plant species. This has become a major management challenge for the Conservancy, especially on land where recent restoration and enhancement construction has taken place.

The most challenging exotic plant species control work during 2003 will be on the Betts, Kismat and Silva sites as the Conservancy enters the second year following restoration and enhancement construction completion. The landscape contractor that conducted the original plantings on the site urged an aggressive three-year program to control exotic weed species so that native species would be more likely to enjoy strong establishment. A comparable challenge will take place on the follow up of the 2002 plantings on the newly-constructed restoration and enhancement construction sites at Lucich South, Bennett North and Bennett South. During 2002, these sites were partially planted, and exotics presented a challenge, and will likely continue to be a challenge as the plantings are completed. These sites have been planted with numerous native grass, shrub and tree species, with more plantings to come on them as the projects are finalized in early 2003.

The Conservancy has yet to identify non-plant exotics that present any significant threat to full and successful implementation of the NBHCP.

#### e. Erosion control.

Since much of the Conservancy's land is in rice agriculture, and since the rice fields have been precision-leveled, there are relatively few erosion control needs or opportunities on current Conservancy land holdings. On the portion of the Conservancy's land that is not in rice production, pasture is the most prevalent land use. Therefore it too, with its ground cover, relative flatness and being well developed with agricultural drains, offers little opportunity or need for erosion control efforts.

The Conservancy's managed marsh complexes are specifically designed to reduce erosion, and the Conservancy expects there to be few erosion challenges around these complexes. In order to control the substantial amount of water flowing through managed marsh components of the Conservancy's reserve system, the Conservancy has invested in water control structures that are extremely durable. The adjoining earthern structures are engineered for high integrity, and the Conservancy has moved quickly to identify and repair any potential weaknesses in these structures.

#### f. Enhancement of native plant communities.

The Conservancy continues, now for the second year, planting a number of native plants on its preserves. The plantings are in accordance with the guidelines provided for in the 1997 NBHCP, and their placement is spelled out in the individual site-specific management plans for the various reserves. These are reviewed by the Conservancy's consulting wildlife biologists, reviewed and approved by the Conservancy's Board of Directors, and submitted to the NBHCP TAC for review and approval through the site-specific management plan approval process. Table 4 shows the native trees and shrubs the Conservancy planted on this year's restoration and enhancement construction projects.

TABLE 4
THE NATOMAS BASIN CONSERVANCY
NATIVE TREES AND SHRUBS PLANTED
IN 2002 ON CONSERVANCY PRESERVES

COMMON NAME	SCIENTIFIC NAME
Tree species	
Arroyo Willow	Salix lasiolepis
Oregon Ash	Fraxinus latifolia
Valley Oak	Quercus lobata
Sandbar Willow	Salix exigua
Western Sycamore	Platanus racemosa
Shrubs	
California Blackberry	Rubus vitifolius
California Wild Rose	Rosa californica
1 Ovote Bruch	Baccharis pilularis
Button willow	Cephalanthus occidentalis
Mule Fat	Baccharis vimimea

The Conservancy's approved site-specific management plan specifies numerous native grass species. Among those planted during 2002 on the Bennett South, Bennett North and Lucich South properties were Blue Wild Rye, California Barley, Idaho Fescue, Native California Brome, Pine Bluegrass and Purple Needlegrass. Tule (Scirpus acutus) was also planted.

TABLE 5
THE NATOMAS BASIN CONSERVANCY
NATIVE TREES PLANTED ON CONSERVANCY PRESERVES AS A
PART OF RESTORATION & ENHANCEMENT ACTIVITIES

SITE THE PART OF T	2001 1	2002 1	2003 <sup>2</sup>
Betts, Kismat & Silva tracts	200		83
Bennett South		60	
Bennett North (planned for Spring '03) <sup>3</sup>		4	4
Lucich South (planned for Spring '03)3			21
Plant Total Per Year	200	60	108

Original planting completed under the habitat creation project.

<sup>2</sup> Plant replacements installed in January 2003.

<sup>&</sup>lt;sup>3</sup> From 2002 construction; delayed by weather. Will be completed in early 2003 when weather conditions permit.

## g. Habitat enhancement activities for the covered species (e.g., construction of artificial burrows for giant garter snake).

The Betts, Kismat and Silva preserves' restoration and enhancement project focused on giant garter snake-friendly design and was finalized in 2002. The uplands irrigated pasture on the Betts tract, specifically geared towards Swainson's hawk foraging, was the subject of additional improvements, particularly those related to water supply and irrigation efficacy. The restoration and enhancement construction project on the Bennett North and Lucich South tracts were largely designed to capture and concentrate a good prey base for giant garter snakes known to populate the neighboring North Drainage Canal. A modest amount of trees were planted on these projects for the benefit of Swainson's hawks. On the Bennett South tract, 21.56 acres of native grass were planted where once there was a rice paddy, and this foraging area is approximately one mile from the Sacramento River and the Swainson's hawk populations there. In addition, on this property 0.51 acres of riparian woodlands were developed as were 1.53 acres of berm grasslands.

On the 241-acre Brennan tract, the Conservancy has planted nearly the entire tract in cover crops suited for Swainson's hawk foraging.

See also Table 4 and Table 5 (above) to see the plantings conducted in 2002 in support of habitat development.

Additional information on habitat enhancement activities can be found in the site-specific management plans, including the update for 2002 in Appendix I.

#### h. Predator control.

The Conservancy Board of Directors previously adopted a resolution<sup>3</sup> which provides for pet restrictions on the Conservancy's rented property.<sup>4</sup> Dogs and cats running loose on the property are seen as potentially harmful to some of the covered species and therefore the Conservancy has remained alert to possible predator and related problems. On numerous occasions, the Conservancy has contacted Sacramento County Animal Control to remove stray dogs left on the Conservancy's land and which roam the area. These control efforts have all been successful.

The Conservancy continues to deal with occasional domestic dogs and cats being introduced onto various preserves. There has been an on-going problem with citizens abandoning their pets on farms, and the Conservancy's property is no exception.

Nonetheless, the Conservancy has consulted with the TAC on numerous occasions regarding the proliferation of coyotes around the burrowing owl mounds on the Conservancy's Silva tract. The TAC has counseled to observe the populations, and if they get excessive, then control measures are warranted. Otherwise, the coyotes are seen as part of the natural habitat. The Conservancy has managed these coyotes so that their populations do not get too large on this tract. The Conservancy is unaware of any additional, substantive, predator control issues on its preserves.

#### i. Control of pesticide uses on reserve lands.

The Conservancy includes as a provision in all of its agricultural leases and right of entry agreements that the use of pesticides on Conservancy mitigation land is strictly controlled. In its land management activity, the Conservancy rarely allows pesticides to be used. Insecticides have not been permitted on Conservancy-owned mitigation land with the exception of occasional use in active farming operations. Rice production generally does not require significant insecticide applications.

Resolution #3.99.23 includes "pet restrictions."

The dog that lives on the Betts tract is owned by the previous land owner but cared for by the Conservancy's caretaker. Since the house lies near the entrance to the Conservancy's land, the dog is helpful in alerting the caretaker to trespassers. Additionally, the dog remains in a very large fenced area and is extremely well trained to never go beyond the fenced area.

Of all the pesticides (e.g., fungicides, insecticides, rodenticides, etc.), the only one permitted to date on Conservancy owned mitigation land (other than in active farming operations) are herbicides. These have infrequently been used for two purposes. First, to reduce plant mass around structures, particularly those subject to fire (numerous incidents of arson have been reported to authorities in and around the northern portion of the Natomas Basin). In these instances, the Conservancy has used herbicides not so much to kill vegetation growth around such structures, but rather, to stunt growth. This has worked well. Second, herbicides have been used to control exotic vegetation. The Conservancy has worked hard to allow native vegetation a better chance at becoming strongly established, and especially with the extensive planting of native plants in 2001 and 2002, herbicides have been used on a limited basis for this purpose. In all cases, the use of herbicides in non-rice production areas has been allowed only after cattle grazing, mowing and other practices have proven impractical, impossible or less efficacious.

#### j. Enhanced ditch and drain management for the covered species on reserve lands.

With the exception of the restoration and enhancement construction projects discussed elsewhere in this report, the Conservancy has not engaged in very much activity related to drain management. Continued drain inspections, clearing of impediments to flow (usually water primrose which has broken free and clogged a culvert) and water quality observations lead the way in this regard.

The Conservancy staff continues to meet periodically with senior management of RD 1000 and the Natomas Central Mutual Water Company to point out areas in and around Conservancy mitigation land where giant garter snakes have been found. These discussions, as well as other familiarization activities, have built an excellent working relationship, and the covered species have or will ultimately benefit directly.

# k. Coordination of any research conducted within reserves with outside species experts and other individuals and groups.

A few research activities were conducted on Conservancy mitigation lands in 2002. The Conservancy has sponsored discussion group activities with representatives of the Swainson's hawk Technical Advisory Committee, examining ideas and options for improving upland land management to benefit Swainson's hawks. This has included an exhaustive scientific literature search (completed after the close of the reporting year).

Additionally, the Conservancy engaged the Sacramento Tree Foundation to conduct a count of trees on Conservancy-owned land in 2002. That report follows as Appendix G. The report helps establish a baseline tree count on Conservancy-owned mitigation lands. As the many recently planted trees mature to a size that they can be counted as mature, and thus included in future tree census reports, there should be a very large change in the total number of trees on these properties.

The Conservancy also authorized a winter bird count on and around Conservancy owned mitigation lands in 2002. This report follows as Appendix J. Again, it was determined that it would be good to obtain a baseline report for those areas generally around Conservancy preserves for future reference.

#### L. Management activities proposed for coming year.

The year 2003 will be the most challenging year ever for the Conservancy. Challenges will be presented primarily by:

- 1. the most aggressive restoration and enhancement construction schedule yet,
- 2. expectation of a revised and improved, yet more complex, NBHCP,
- the need to implement effective management for recently-constructed restoration and enhancement projects on the Betts, Kismat, Silva, Bennett North, Bennett South and Lucich South tracts, and
- 4.) incorporation of an additional habitat conservation plan, the Metro Air Park HCP, into the Conservancy's program of work.

Given that the Conservancy's inventory of mitigation land has risen dramatically in the past few years (see Table 2), plan implementation is coming much faster than had been expected, so the Conservancy will be working with all concerned to refine its work and make certain plan implementation stays on tract.

Figure 2. Acquisitions Continue in the Swainson's hawk Zone. In 2002, the Conservancy acquired two additional properties in the Swainson's hawk Zone, including the Alleghany 50 tract at the bottom of the photo at right and the Cummings tract at the top. Note the Sacramento River at left and Fisherman's Lake in the upper right hand corner. Photo: Cal Aero Photo for The Natomas Basin Conservancy.



In addition, the Conservancy has begun efforts at reserve consolidation. It now looks to further consolidate reserves around the North Basin Reserve Area, the Central Basin Reserve Area and the Fisherman's Lake Reserve Area. This will assist with reserve contiguity, and at the same time, very likely assist with more effective land management.

For the year 2003, activity will center around:

- 1. remaining on an aggressive compliance track so that timely reports are submitted as required by the NBHCP and IA,
- managing acquired mitigation lands for the benefit of the covered species, particularly as a result of the changes in the land attributable to the sizable restoration and enhancement activities planned for the year,
- purchasing or accepting additional mitigation land as required and needed, including working towards greater reserve consolidation,

- continuing to complete species monitoring projects for the Swainson's hawk and giant garter snake,
- appropriately managing newly-created restoration and enhancement projects to make certain invested funds achieve intended aims (e.g., achieving strong stand establishment of native vegetation, setting up water management practices that efficiently and effectively supply newly-created managed marsh with water),
- planning, initiating and overseeing new restoration and enhancement construction projects, and
- 7. refining upland management practices so that optimum Swainson's hawk foraging opportunities exist on Conservancy land.
- 7. A description of the habitat enhancement activities conducted in the previous year and those proposed for the coming year.

A discussion on enhancement activities conducted the previous year has been incorporated into several items above. Proposed habitat enhancement work can be found in item I.6 above as well as the revised site-specific management plan update (see Appendix I). The Conservancy is experiencing an intensive amount of such work given the rapid acquisition of mitigation lands.

 A report of any scientific research authorized or conducted in the previous calendar year on Conservancy Lands other than research conducted directly by USFWS or CDFG, and a description of any research proposed for the coming year.

See item section I.6 (k) above.

Research planned for 2003 falls primarily into monitoring efforts, including a.) monitoring for the giant garter snake, and 2.) monitoring for the Swainson's hawk. However, the aforementioned cooperative work with the Swainson's hawk Technical Advisory Committee will be an important initiative for 2003. This effort is directed towards identifying upland land management practices that maximize foraging opportunities for the Swainson's hawk.

 An itemization, if known, of the number of individuals of the Covered Species taken by the Conservancy in the course of management, relocation, or scientific study, and the disposition of those individuals.

The Conservancy did not detect any incidental take of any of the covered species in the form of death or injury resulting from its restoration, enhancement and management activities. However, some individuals of the covered species may have been disturbed or harassed, and it is possible some may have been injured but avoided detection during these activities. Management activities were mostly agronomic in nature, including water management, livestock management, crop cultivation, vegetation management, debris removal, etc., and took place on all of the land mapped and found in Appendix B. Restoration and enhancement construction activities took place on the Conservancy's Betts, Kismat, Silva, Bennett North, Bennett South, and Lucich South tracts (see referenced map in Appendix B). These activities included earth moving, installation of water control structures, planting of vegetation, and other activities normally associated with construction of marsh. Measures the Conservancy has taken to avoid and minimize incidental take are those found in the NBHCP and the site-specific management plan for the site in question, all of which were observed by Conservancy staff and contractors. The Conservancy employs biologists to conduct on-site restoration and enhancement monitoring activities in order to detect take and ensure implementation of take avoidance and minimization measures. The Conservancy communicates and advises its lessee farmers (see Section 6b above, "Suitable agricultural practices") and contractors as to the importance of avoiding take and reporting it where it occurs.

No incidental take was reported by Conservancy monitors or others conducting activities on Conservancy land. Because these measures have been employed, the Conservancy believes any incidental take of the covered species has been minimized and avoided as much as possible, and that any take that occurred falls within the amount authorized in the Incidental Take Permit. Take that may have occurred as a result of scientific activities (such as capture and disturbance) are outlined in the monitoring reports found in Appendix D and E. Take of giant garter snakes as a result of scientific activities is also covered under separate federal permit under section 10(a)1(A) of the ESA. Monitoring of the Swainson's hawk was carried out under the terms of a Memorandum of Understanding between the Conservancy's contractor and the California Department of Fish and Game.

10. A yearly financial report prepared by a certified public accountant which provides: a tabulation of all Habitat Acquisition Fees and other Mitigation Fees collected by the Conservancy; all other sources of income to the Conservancy; all expenses incurred by the Conservancy during the previous year, including an itemization of all expenses incurred in land acquisition activities; the amount of funds held in reserve for future acquisitions; and the value of the endowment fund established from Endowment Fees.

In Appendix H, a financial statement for the Fiscal Year ended December 31, 2002 is presented. Audited financial statements are prepared each year and are generally available around April 1.

11. An assessment of the adequacy of funding projected for the coming year and a recommendation as to the amount that the Base Mitigation Fee should be increased or decreased as specified in Sections 4.5.7, 4.5.8, or 4.5.9 of this Agreement.

In Appendix L, the Conservancy presents a summary of the financial model update it requisitioned during the reporting period (completed April 25, 2002). The model indicated a need for an increase in HCP fees. Accordingly, the Conservancy adopted a resolution<sup>5</sup> requesting that the City of Sacramento increase HCP fees (see Table 6, HCP Fee History). The Sacramento City Council voted unanimously soon thereafter (May 21, 2002; resolution #2002-300) to accept this recommendation and implement it immediately.

The pattern and process for evaluating the need for fee adjustments, and then getting all the necessary authorizations to implement such adjustments, has become well established. As the Conservancy progresses with implementing the NBHCP, its ability to estimate costs is enhanced. This in turn helps produce yet more refined budgeting activity.

TABLE 6
HCP FEE HISTORY

 YEAR	ESTABLISHED FEE
1997	\$2,240
1998	\$2,656
1999	\$3,292
2000	\$3,942
2001	\$5,993 + \$4,028 premium = \$10,021 *
2002	\$7,934 + \$4,028 premium = \$11,962 *

<sup>5</sup> Conservancy Board of Directors resolution #05.02.02 adopted by unanimous vote May 1, 2002.

<sup>\*</sup>HCP "premium" was established as a result of an agreement to settle litigation, FWS v. Babbitt.

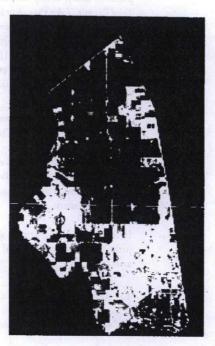
### 12. Maps depicting items set forth under paragraphs (1), (2), (3), (4), and (5) above.

In Appendix A, the Conservancy provides maps of fees paid as presented by the City of Sacramento. In Appendix B, maps of Conservancy mitigation lands are provided. In addition, the Conservancy has completed land surveys of all acquired mitigation lands. The surveys conform to American Land Title Association (ALTA) requirements and are available in the Conservancy's office.

Figure 3. Aerial Photos of All Conservancy Lands Have Been Taken. The Conservancy has had aerial photos taken of all of its mitigation land. The photo at right is of the entire Natomas Basin, taken in September of 2002. The Conservancy acquires such basin-wide photos to allow tracking of its restoration and enhancement construction projects. The Conservancy's restoration and enhancement construction efforts can be seen in this photo, and include the Betts, Kismat, Silva, Bennett North, Bennett South and Lucich South tracts.

Other features include the Sacramento International Airport at left and the urbanized City of Sacramento in the lower portion of the photo. The Sacramento River runs along the left boundary of the photo, and the Natomas Cross Canal runs across the top.

The aerial photo can be viewed in larger format and downloaded by accessing the Conservancy's web site at www.natomasbasin.org, Photo: LANDSAT.



#### Copies of all data collected and reports generated as a result of scientific research conducted on Conservancy Lands.

Reports covering such work conducted during 2002 include, 1.) monitoring for the giant garter snake (see Appendix D), 2.) monitoring for the Swainson's hawk (see Appendix E), 3.) geophysical testing on the Conservancy's pre-construction tracts (see Appendix C), and 4.) phase one environmental reports for newly acquired mitigation land (see Apendix F).

A report taking a survey of all trees located on Conservancy-owned mitigation land can be found in Appendix G and a winter bird count report can be found in Appendix J.

ALTA surveys of newly acquired mitigation land were also completed and are on file with the Conservancy at its office.

#### 14. An accounting of the long-term endowment account.

An accounting of the Conservancy's Endowment Fund can be found in Appendix H along with the financial statement of the organization. During 2002, the Conservancy's Board felt there were sufficient assets in the Endowment Fund account (\$1,914,434.00 at year end) to employ the services of an Endowment Fund manager. By resolution #10.02.03, the Conservancy's Board of Directors voted unanimously at its October 2, 2002 meeting to select Wells Fargo Investments as its Endowment Fund investment manager. The action followed adoption of an Endowment Fund Investment Policy (resolution #09.02.03, adopted by unanimous Board of Directors vote on September 4, 2002). The action of placing the funds with the Investment Fund Manager was to take place as soon after December 31, 2002 as possible.

#### 15. All other information described in Chapter IV, Section G.4 of the NBHCP.

See item number (6) above for a complete list of information listed in the HCP.

Other management activity included occasional meetings or communications with adjacent and neighboring land owners to update them with the Conservancy's program and to discuss any other issues related to the land management activities going on in and around the Conservancy's mitigation lands.

The Conservancy also acted to remove illegally dumped debris on Conservancy-owned properties. This activity seems to be taking greater time and effort as the amount of Conservancy mitigation land grows.

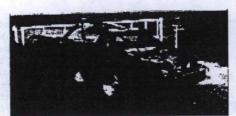


Figure 4. Land Management Responsibilities Grow. As the Conservancy's land holdings grow, so do its management responsibilities. In 2002, the Conservancy saw more debris illegally dumped on its property than ever before. An example includes the vehicle pictured at left, disposed of one evening on the Conservancy's Lucich South preserve. Photo: The Natomas Basin Conservancy.

The Conservancy continues to install locks on all access gates on Conservancy mitigation land. It also controlls trespassing and hunting on such lands as well.

Property tax management has taken a considerable amount of the Conservancy's time, and the Conservancy enrolled several of its Sutter County properties in Williamson Act contracts in 2002. This will help reduce the property tax burden on Conservancy-owned farm land.

The Conservancy entered into an agreement with Sutter County during 2002 with respect to restoration and enhancement construction on Conservancy-owned mitigation land. The agreement can be found in Appendix K. In what may be the first of its kind between a habitat lands management organization and a unit of local government, the Conservancy and Sutter County signed the agreement to facilitate long-range planning and coordination between the two entities. The agreement term is for 20 years, and covers Conservancy-owned mitigation land in the Sutter County portion of the Natomas Basin. A procedure for revisions is included in the agreement so that any additional Conservancy mitigation land acquisitions can be included.

The agreement, titled "Development Agreement Between The County of Sutter and The Natomas Basin Conservancy," was approved by both the Sutter County Board of Supervisors and the Board of Directors of the Conservancy. The Conservancy's Site-Specific Management Plan, which details how each of the Conservancy's preserves will be structured and used, was an instrumental part of the agreement.

The agreement provides for Sutter County to continue to exercise its authority over land use within its borders, and sets a clear plan for the Conservancy's habitat development activity. This will help both the County and the Conservancy with long-range planning and budgeting. The Conservancy owns approximately 1,300 acres of land in the Sutter County portion of the Natomas Basin.

The Conservancy also manages participation in federal farming programs, working regularly with the U.S.D.A.'s Farm Services Agency in Yuba City, California to preserve eligibility of Conservancy farming tracts in the relevant programs.

Additional efforts in managing rental housing, repairing electrical, plumbing and HVAC in the rental housing, and locating signage and gates around these areas took additional staff effort.

Finally, Conservancy management has some responsibility to provide a public education component in its implementation of the NBHCP. In Figure 8, a reproduction of the Conservancy's web site home page is shown. The web site is designed to be easily updated, facilitate downloading of large files, and serve as a good reference point for those interested in the Conservancy's work. Available to the site's viewers is a copy of the instructional brochure completed by the Conservancy (see Figure 5). Also available are copies of several reports, maps, photos and news items. One of the most exciting features of the site is the viewable and downloadable video sequence of the Swainson's hawk. The production of the video was completed with the assistance of the Friends of the Swainson's hawk.



Figure 5. New Conservancy Brochure Features Completed Restoration and Enhancement Construction Project. The Conservancy completed and made available on its web site an informational brochure discussing its activities and responsibilities. Featured on the cover of the brochure (see at left) is the Conservancy's first completed restoration and enhancement construction project on the Betts, Kismat and Silva preserves in Sacramento County. Photo: GriMedia for The Natomas Basin Conservancy.

# II. NATOMAS BASIN HABITAT CONSERVATION PLAN SECTION IV.G.3

Accounting for each jurisdiction (City of Sacramento, Sacramento County, and Sutter County):

- Take: The annual incremental and cumulative area converted to urban development:
  - a. In the applicable permit area and entire NBHCP area.
  - b. In the Swainson's hawk zone (the area within 1 mile of the Sacramento River).
  - c. In vernal pools.

The Conservancy provides information from the City in this regard in Appendix A which follows.

- Mitigation: The annual incremental and cumulative area of mitigation lands acquired:
  - a. In-Basin:
    - i. Lands managed as marsh.
    - ii. Lands managed as rice, including associated fallow land.
    - iii. Lands managed as upland reserves.
  - b. Out-of-Basin in Area "B."
  - c. Out-of-Basin in Area "C."
  - d. Status of the initial 400 acres (when purchased and what habitat type).
  - e. Mitigation for vernal pools, as appropriate.

Please refer to Section I (3) and Table 3 above for a response to "a." See also Section III (2) and Table 7.

As to "b," no lands have been acquired in Area B.

As to "c," no lands have been acquired in Area C.

As to "d," the initial 338 acres were acquired at the Betts, Kismat and Silva tracts. At present, the habitat type is a mix of upland reserve with a large percentage converted (or restored) to managed marsh. An aerial photo of the three tracts can be found in Figure 5.

The initial 400 contiguous acres were acquired in 1999 with the acquisition of the Lucich South and Bennett South properties. Combined, the tracts total 484.375 acres. Lucich South and Bennett South were both under restoration and enhancement construction during 2002. With the exception of minor remaining vegetation planting and minor construction remaining, the projects are largely completed. Lucich South remains mostly in rice, with a 200-foot wide strip of managed marsh on its easterly border against the North Drainage Canal. The North Drainage Canal is the site of numerous giant garter snake captures during recent monitoring efforts. The rice field drainage will spill into the 200-foot wide managed marsh area, thus concentrating prey for the giant garter snake.

The Bennett South tract is somewhat similar in status. Much of it remains in rice production, and the southern portion of the property contains managed marsh. The site also contains 29.05 acres of planted native grass and trees (see graphic, Figure 6).

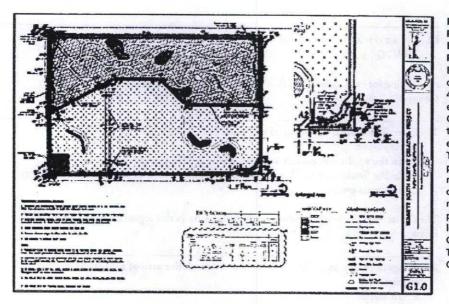


Figure 6. Bennett South Restoration and **Enhancement Construction** Project. The Conservancy's Bennett South tract is a component of the original 400-acre contiguous preserve established by the Conservancy. In 2002, it was the site of restoration and enhancement construction. The site-specific management plan (seen at left) called for managed marsh and acreage of upland reserve planted to native grass with pods of planted trees scattered in six locations on the parcel. Graphic: Wildlands, Inc. for The Natomas Basin Conservancy.

As to "e," there are vernal pools on the Silva tract, developed under the 2001 restoration and enhancement project on the site. They appear to be in excellent condition.

#### 3. Financial status:

- a. The amount and source of funds collected.
- b. Funds expended or committed for acquisition.
- c. Funds held in reserve.
- d. Summary of expenditures for and revenues from reserve land management.
- e. An accounting of the long-term endowment account.

An entire accounting and response to this section can be found in Appendix H.

# III. NATOMAS BASIN HABITAT CONSERVATION PLAN SECTION IV.G.4

 The amount and location of all lands approved for urban development by public agencies (e.g., public works projects) for which mitigation fees were paid to the NBC in the preceding year.

Please see the schedule of the amount of all lands for which mitigation fees were paid in Appendix A. A map showing the location of such land from the City of Sacramento is also included.

2. A description of the locations and condition of any mitigation lands acquired in fee simple or conservation easement in the preceding year.

A record of all lands acquired by the Conservancy by size and date of acquisition can be found in Table 2, page 2, titled, The Natomas Basin Conservancy, Land Acquisition Tally. A quick reference guide to all Conservancy preserves can be found in Table 7, Reserve Characteristics Illustration. A map showing the location of the following tracts can be found in Appendix B. General descriptions for the properties acquired during the preceding year follow. Descriptions describe the property at the time of acquisition:

Ayala tract (part of the Central Basin reserve complex). This 316.3674-acre parcel is bound by the East Drainage Canal on its West boundary and with some exception, Elverta Road on its North. It is nearly square in shape, except that the northeast corner is shaved off. The property is bordered on its east, south and west by sizable water conveyance structures. It has historically been used as a rice field, and it borders what has historically been known as "snake alley." It is nearly completely within the 100-year flood plain, and is known as one of the lowest places in the Natomas Basin. Its southern boundary lies approximately 7.25 miles north of downtown Sacramento and 1.25 miles north of the City of Sacramento City Limits line at Elkhorn Boulevard.

The Ayala tract has Sacramento County assessor parcel numbers 201-0180-016 and 201-0190-047. It is provided water by the Natomas Central Mutual Water Company. It was purchased by the Conservancy on February 20, 2002.

Sills Ranch tract (part of the Central Basin reserve complex). The Conservancy's 575.559-acre Sills Ranch tract lies on the northwest corner of the intersection of U.S. Highway 99 and Elverta Road. It is roughly in an upside-down "L" shape. It lies approximately 8.25 miles northwest of downtown Sacramento. The land is almost completely surrounded by rice farms, and it has been planted to rice most of its modern history. On the east and north, it is bounded by large water conveyance structures, and on the west, it is mostly bordered by a large water conveyance structure, in which several giant garter snakes were identified in the summer of 2002. Beyond the large water conveyance structure on the eastern boundary lies U.S. Highway 99. The property is bounded on the south by Elverta Road, then more rice fields.

The Sills Ranch tract has Sacramento County tax assessor numbers 201-0030-018 and 201-0120-033. It was purchased by the Conservancy on July 15, 2002. The property was partly dedicated to the Conservancy by Alleghany Properties, Inc. in lieu of payment of the Acquisition Fund portion of the NBHCP fee.

It is provided water service by the Natomas Central Mutual Water Company.

# TABLE 7 THE NATOMAS BASIN CONSERVANCY RESERVE CHARACTERISTICS ILLUSTRATION\*

will be uther that have been a	OPDER OF ACQUIRED DATE														
en de de de constante de la co	Silva	Betts	Kismat	Bennett North	Bennett South	Lucich North	Lucich South	Brennan	Frazer	Souza	Natomas Farms	Ayala**	Sills**	Alleghany 50**	Cummings**
COUNTY				10											
Sacramento	•	•	•	NA CONTRACTOR	Hi.do	7 71	118			•	•	•	•	•	
Sutter	0	0		•	•	•	•	•		LEE					
PLANNED LAND USE	-														
Rice	122561			•			•		N. IL	7 (1)	B. F		•		
Upland	•	•	•	100		0		•	0	•	0				
Marsh	•	•	•	0	•	0	0	0	0	1	0	0			
WATER	1	P			D.FR		W.Y		-	1879	NA.		= 1, -1		
Natomas Water Co.		g/ast		•		•		156	•				•		
Ground Water	•	•			1	0	45,14	•	- AW	1					0
Surface Water	•	•	•									Jan e			
MANAGEMENT PLAN			-A 15	0121		14	a Do I	- HYA	1 12		SYA	E GIL			
Covered by Approved SSMP	P	V	9	d	4	V	0	0	1	1	0	-0.3			
Not yet covered		H		10		-			THE S		-		•	•	
Marsh Construction-2001	Co.	0	4				3 120	235			119				
Marsh Construction-2002		M	T	0	4		4	0	1 10		E I				
Marsh Construction-2003		_ Dy			177	•	7537	Vision	•						
EXISTING TREES		ALIE I	1		133				1000	173					
0				•		•	•	300	•	12 13	124	•			
1 – 10			•			1281			(DEI	3,75	•				
11 – 30								•	1	•		0.1			
31+	•	•			172.4	MILE				=(=)				•	
OTHER	2/10				1711	1.45	1111	14	Taran Taran	N. Cal					
Fenced	•	•	•	174	0		TO STATE OF	0	189.51	0	0				
Active Cattle Grazing	•	•	•							0	0				
Residential Structure(s)	•	•	Daniel Control					7-6		•	OIL.				
Agricultural Structure(s)	•	•		STEL	1217.19					•					
Vernal pools	0			1311	-	100		2.95	THE						

<sup>\*</sup> Solid dot (•) represents inclusion of characteristic on that tract; hollowed-out dot (O) represents minor or partial inclusion on the referenced tract; a check mark (&) represents completion of project.

<sup>\*\*</sup> Since site-specific land management plans did not exist for the Conservancy's Ayala, Sills, Alleghany and Cummings tracts at the end of 2002, the "planned land use" designation in this illustration for these tracts are actually "anticipated" land uses and have not received required approvals.

Alleghany 50 tract (part of the Fisherman's Lake reserve complex). This 50.2601-acre parcel lies at the northeast corner of the intersection of San Juan Road and Garden Highway in Sacramento County, adjacent to Garden Highway is the Sacramento River. It is approximately 3.75 miles northwest of downtown Sacramento.

It has historically been used as upland crop or row crop ground, most recently in tomatoes and wheat. It has numerous large trees at selected locations on its borders, including numerous trees in the north central portion of the property. It lies approximately 3,200 feet south of Fisherman's Lake.

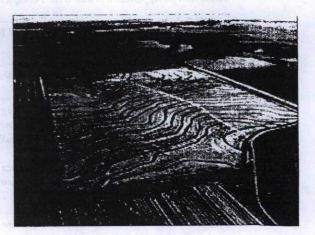
The tract has Sacramento County assessor parcel number 225-0190-011. It is provided water by the Natomas Central Mutual Water Company. It was acquired by the Conservancy through partial donation and partial purchase November 7, 2002 in a deal with Alleghany Properties, Inc.

Cummings tract (part of the Fisherman's Lake reserve complex). This 66.8307-acre parcel lies approximately four miles northwest of downtown Sacramento in the County of Sacramento. It is bounded on the northeast by Fisherman's Lake and on the west by Garden Highway, then the Sacramento River (see aerial photo, Figure 7).

Most of the tract has historically been used for growing rice, although the soil on the westernmost portion of the property will not support rice, and could be planted to upland crops. It has numerous large trees at selected locations on the western border of the property. There is a groundwater well on the property, although its quality and yield have not yet been determined.

The tract has Sacramento County assessor parcel numbers 225-0110-018 and 225-0110-051. It is provided water by the Natomas Central Mutual Water Company. It was acquired by the Conservancy through partial donation and partial purchase November 7, 2002 in a deal with Alleghany Properties, Inc.

Figure 7. Strategically
Acquired Mitigation Land.
The photo at right shows the
Conservancy's Cummings
tract, acquired in 2002. Note
Fisherman's Lake in the lower
right hand corner and the
Sacramento River in the
upper portion of the photo
with the Cummings tract in
between. Photo is looking in
a westerly direction. Photo:
GriMedia for the Natomas
Basin Conservancy.



An accounting of the taking of any individual giant garter snakes, Swainson's
hawks, or other covered species, if known, as a result of activities in the City's or
Counties' permit areas in the preceding year, including any specimens taken for
scientific purposes.

See Section I.9 (above) for a thorough discussion on this point.

4. Plans for the acquisition of reserve lands in fee simple or conservation easement in the forthcoming year.

At the time of this annual report, there were no plans to purchase property for 2003. This is due largely to the fact that the City has collected fees on 4,599.11 acres, and issued urban development permits on 4,324.1 acres. At the 0.5 to 1.0 mitigation ratio, that totals 2,162.05 acres needed for mitigation. The Conservancy presently holds 2,802.65 acres, so this surplus condition of 640.6 acres suggests there will be no need to acquire mitigation land in the near future.

However, to the extent the Conservancy will be acquiring property in 2003, it will focus on reserve consolidation. Other attractive properties with substantial biological values may surface and offer excellent opportunities. However, the priority of the Conservancy remains in the area of reserve consolidation in the North Basin Reserve Area, Central Basin Reserve Area and Fisherman's Lake Reserve Area.

The aim of the Conservancy's mitigation land acquisition program is to continue to attempt to assemble land necessary to meet the 2,500-acre contiguous land requirement, along with smaller parcels in minimum 400-acre blocks.

An outline of habitat management, enhancement, and monitoring activities conducted in the preceding year and planned activities and goals for the forthcoming year.

Please see I.6 above for a full discussion of this subject.

Pertinent results of biological surveys and monitoring activities conducted in the preceding year.

Please refer to Appendices D and E for a complete reporting on this issue.

 Pertinent information from RD1000 and NCMWC as described in Section C.1.e above (Reporting/Revisions).

Reports from RD 1000 and Natomas Mutual Water Company follow in Appendix M.

 Any other pertinent information regarding implementation by the permittees of the terms of the NBHCP and its associated permits or circumstances within the reserve system specifically or the plan area generally.

The Conservancy continues to serve as a resource for those planning the revised NBHCP. Parties involved in this activity include the City of Sacramento and the County of Sutter. Since Metro Air Park has received its Incidental Take Permit, the Conservancy will serve as plan operator for this plan as well. In both cases, the Conservancy leaves policy issues to the plan proponents. The Conservancy's role remains one of providing information about the implementation and operation of the HCP.

As further indications of Conservancy activities during the reporting year, copies of extracts of the adopted minutes of all Conservancy Board of Directors meetings can be found in Appendix N.

# IV. Annual Work Plan Section IV.D.1

The work plan for the Conservancy's year 2003 effort can be found in Section I.6.l, "Management activities for the coming year."

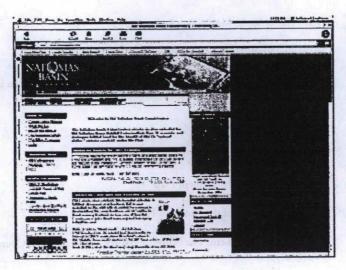


Figure 8. Conservancy Web Site Established and Used in 2002. Although formally initiated in 2001, during 2002 the Conservancy's web site became substantial and fully operational. It can be found at www.natomasbasin.org. The web site includes copies of numerous documents used by scientists, biologists and interested public. Given its utility and wide accessibility, it is fast becoming a repository for considerable information. Photo: The Natomas Basin Conservancy.

### TABLE OF APPENDICES

Appendix A: Report from the City of Sacramento

Appendix B: Maps of Mitigation Land Acquired To Date

Appendix C: Geophysical Reports and Studies on Conservancy Land, 2002

Appendix D: Giant Garter Snake Monitoring Report, 2002

Appendix E: Swainson's hawk Monitoring Report, 2002

Appendix F: Phase One Environmental Reports for Mitigation Land Acquisitions in

2002

Appendix G: Tree Count, Summer 2002

Appendix H: Financial Statement

Appendix I: Site-Specific Land Management Plan

Appendix J: Winter Bird Survey of the Northern Natomas Basin

Appendix K: Development Agreement, The Natomas Basin Conservancy and County of

Sutter

Appendix L: Economic Planning Systems' Finance Model Update

Appendix M: Reports from Reclamation District 1000 and Natomas Mutual Water

Company.

Appendix N: Minutes Recap of the Board of Directors Meetings, The Natomas Basin

Conservancy

#### GLOSSARY AND ABBREVIATIONS

Annual Report

The Implementation Annual Report. The Conservancy is required under Section 5.2 of the Implementation Agreement and Section IV.G.4 of the Natomas Basin Habitat Conservation Plan to produce and deliver an implementation annual report no later than 60 days after the close of the calendar year. Items to be included in the report are specifically prescribed.

CDFG

California Department of Fish and Game

Conservancy

The Natomas Basin Conservancy. A California non-profit public benefit corporation serving as "plan operator" of the Natomas Basin Habitat Conservation Plan.

Giant garter snake (Thamnophis gigas) The giant garter snake is one of the largest garter snakes of the genus Thamnophis, with a total length up to 4.5 feet or greater. The garter snake in the Sacramento Valley and Delta regions has a dorsal ground color often dark brown to olive or nearly black, a complete dorsal strip varying in color from dull yellow to bright orange, and often orange on the ventral surfaces as well. Officially listed as a "threatened" species under federal and state authority, it is one of the two primary species protected under the NBHCP.

The Natomas Basin Habitat Conservation Plan Implementation Agreement. (See NBHCP)

MAPPOA

Metro Air Park Property Owners Association, permittee of the Metro Air Park Habitat Conservation Plan.

NBHCP

The 1997 Natomas Basin Habitat Conservation Plan. The NBHCP applies to the 53,341-acre interior of the Natomas Basin, located in the northern portion of Sacramento County and the southern portion of Sutter County. The Basin contains incorporated and unincorporated areas within the jurisdiction of the City of Sacramento, Sacramento County and Sutter County. The purpose of the 1997 NBHCP is to promote biological conservation along with economic development and the continuation of agriculture within the Natomas Basin. The NBHCP establishes a multispecies conservation program to mitigate the expected loss of habitat values and incidental take of protected species that would result from urban development, operation of irrigation and drainage systems, and rice farming. The goal of the NBHCP is to preserve, restore, and enhance habitat values found in the Natomas Basin while allowing urban development to proceed according to local land use plans. The NBHCP is a supporting document for federal Section 10(a)(1)(B) and State Section 2081 permit applications. Section 10(a)(1)(B) of the federal Endangered Species Act allows incidental take of endangered or threatened species subject to its permit requirements. Similarly, State Section 2081 of the California Fish and Game Code allows the California Department of Fish and Game to enter into management agreements that allows activities which may otherwise result in habitat loss or take of individuals of a state listed species.



Loggerhead shrike (Lanius ludovicianus) One of the NBHCP's "covered species" and seen on the Conservancy's Silva tract during 2002.

Managed marsh

Seasonal or perennial wetland managed for habitat values for the giant garter snake, a federally protected species, and other covered species. Such land must meet minimum requirements as described in the NBHCP which include, but are not limited to, an assured water supply that will serve the marsh from April through September of each year. The marsh will be a combination of open water, land with wetland vegetation, and other upland areas and may include a buffer area at the periphery. The Conservancy must develop detailed management plans pursuant to Chapter IV, Sections C.1 and D of the NBHCP for those Conservancy lands designated as managed marsh, in coordination with and subject to the approval of the CDFG and USFWS.

Permit

Or, incidental take permit. A permit issued by the USFWS under Section 10 (a)(1)(B) of the federal Endangered Species Act which authorizes the incidental take of a covered species which may occur as a result of urban development, rice farming and management activities with the permit area. Permit may also be used to collectively refer to Section 10 (a)(1)(B) permit, and the Section 2081, management authorization, of the State of California.

RD 1000

Reclamation District 1000.

Swainson's hawk

(Buteo swainsoni) The state-listed threatened Swainson's hawk is a medium sized buteo (25 to 35 ounces) and is distinguished from other buteos by long, narrow, pointed wings. Swainson's hawk plumage varies greatly. Light phase birds have buff white wing linings with darkly barred brown flight feathers; dark phase birds are dark brown with white undertail coverts, and intermediate reddish plumage occurs between phases. It is one of the two primary species covered in the 1997 NBHCP.

TAC

Technical Advisory Committee. The TAC consists of six members, two each appointed from the City of Sacramento, the California Department of Fish and Game and the U.S. Fish and Wildlife Service.

USGS/BRD

United States Geological Service, Biological Resource Division. The Conservancy works with the Dixon, California office of USGS/BRD on giant garter snake matters.

USFWS

United States Fish and Wildlife Service.

Water Company

The Natomas Central Mutual Water Company is the purveyor of water to most of the Conservancy's mitigation land. The Conservancy owned 2,209 shares of stock in the Water Company at December 31, 2002.



The Natomas Basin Conservancy 1750 Creekside Oaks Dr., Suite 290 Sacramento, CA 95833

Phone: 916.649.3331 FAX: 916.649.3322

# IMPLEMENTATION ANNUAL REPORT

CALENDAR YEAR 2003

APRIL 30, 2004

- INTRODUCTION
- 2 TABLE OF CONTENTS
- 3 LIST OF TABLES
- 4 HIGHLIGHTS
- 5 IA SECTION 5.2
- 6 NBHCP SECTION IV.G.3
- 7 NBHCP SECTION IV.G.4
- 8 NBHCP SECTION IV.D.1
- 9 TABLE OF APPENDICES
- 10 GLOSSARY AND ABBREVIATION

OTHE NATOMAS BASIN CONSERVANCY 2004

# INTRODUCTION

This report responds to a requirement of the 1997 Natomas Basin Habitat Conservation Plan (Section IV.G.4) and the Implementation Agreement (Section 5.2) which calls for an implementation annual report. It also responds to the 2003 Natomas Basin Habitat Conservation Plan (NBHCP) and Implementation Agreement (IA). The Conservancy operated approximately halfway through 2003 under the 1997 NBHCP and the remainder of the year under the 2003 NBHCP. Since the year was begun and operated under the 1997 NBHCP, the formatting for that plan will serve this year's report. However, for purposes of complying with the 2003 NBHCP, this year's report will also provide a check-list format showing early progress in following the 2003 NBHCP and IA. This comes in the form of Appendix C.

This is the fifth full-year annual report prepared by the Conservancy. As additional accomplishments of the Conservancy accumulate and responsibilities expand with the growth of mitigation acreage, more information will be available in future annual reports.

The goal of the presentation style of this report is to follow the reporting requirements of the NBHCP and IA. Since reporting compliance is a key element in the operations of the Conservancy, this format should be helpful to the reader in assuring all reporting requirements are fulfilled.

The Conservancy is pleased to present this report and to share the many positive steps it has taken towards successful implementation of the Natomas Basin Habitat Conservation Plan.

Those wanting further information may contact the Conservancy at:

The Natomas Basin Conservancy 1750 Creekside Oaks Drive, Suite 290 Sacramento, CA 95833 Telephone: 916.649.3331 FAX: 916.649.3322 www.natomasbasin.org



Swainson's hawk (Buteo swainsoni)

#### SPECIAL NOTE

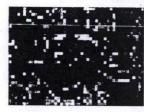
This version of the 2003 Implementation Annual Report contains only the main body of the report itself, and appendices are not provided. Copies of the appendices (see "Table of Appendices" in this report) are available from the Conservancy for public viewing should they be needed. Also, although this version is nearly identical to the official "record" version, there are slight variances. It is intended to provide a more readable and cost-effective presentation of the 2003 Implementation Annual Report. Those wishing copies of the appendices and official record version may obtain them for normal copying charges.

# TABLE OF CONTENTS

Introdu	uction	i
Table o	of Contents	ii
List of	Tables and Figures	iii
Highlig	hts of the 2003 Implementation Annual Report	iv
Charts	Lot Smill Education Committee Commit	V
I. Impl	ementation Agreement Section 5.2	
1.	The number of acres of land approved for development	1
2.	An estimate of the amount of land graded	1
3.	The aggregate number of acres acquired or encumbered	1
4.	A description of any land conveyed to others	4
5.	A summary of the aggregate number of acres owned in fee with managed marsh	4
6.	A description of management activities	6
7.	A description of habitat enhancement activities	18
8.	A report on scientific research authorized or conducted	18
9.	An itemization of the number of individuals of covered species taken	19
10.	A yearly financial report	19
11.	An assessment of the adequacy of funding	20
12.	Maps	20
13.	Copies of data collected and reports generated	21
14.	An accounting of the endowment fund	21
15.	Other information	22
II. Na	tomas Basin Habitat Conservation Plan, Section IV.G.3	
1.	Area converted to urban development	23
2.	Mitigation land accounting	23
3.	Financial status	24
III. Na	tomas Basin Habitat Conservation Plan, Section IV.G.4	
1.	Amount and location of lands approved for urban development	25
2.	A description of mitigation lands	25
3.	An accounting of any taking activity	28
4.	Plans for acquisition of mitigation lands	28
5.	An outline of habitat management, enhancement and monitoring	28
6.	Pertinent results of surveys and monitoring	28
7.	Pertinent information from RD 1000 and Natomas Mutual Water Company	29
8.	Other pertinent information	29
IV. N	atomas Basin Habitat Conservation Plan, Section IV.D.1	30
Table	of Appendices	31
Gloss	any and Ahbreviations	32

## LIST OF TABLES

Table 1,	HCP Fee-Paid Acres	1
Table 2,	Land Acquisition Tally	2
Table 3,	Managed Marsh/Rice/Uplands Tally	3
Table 4,	Land Information Detail	5
Table 5,	Expected "Most Favored" Swainson's Hawk Foraging Crops	8
Table 6,	Native Trees and Shrubs Planted in 2003 on Conservancy Preserves	13
Table 7,	HCP Fee History	20
Table 8,	Reserve Characteristics Illustration	27



Giant garter snake (Thamnophis gigas)

# LIST OF FIGURES

Figure 1,	Summer 2003 Restoration and Enhancement Construction	6
Figure 2,	GGS Observed Adjacent to Bennett North Tract	17
Figure 3,	Acquisition of Huffman Tracts Advances Consolidation of Reserves	18
Figure 4,	Restoration and Enhancement Project Slated for Conservancy's Cummings Tract	19
Figure 5,	Aerial Photographs of All Conservancy Land Have Been Taken	21
Figure 6,	ALTA Surveys Made on All Conservancy Land	21
Figure 7,	Aerial Photographs of All Conservancy Lands Have Been Taken	24
Figure 8,	GGS Identified on Conservancy Preserve	28
Figure 9.	Conservancy's On-Going Consultations	29

# 2003 HIGHLIGHTS THE NATOMAS BASIN CONSERVANCY

#### ACQUISITION

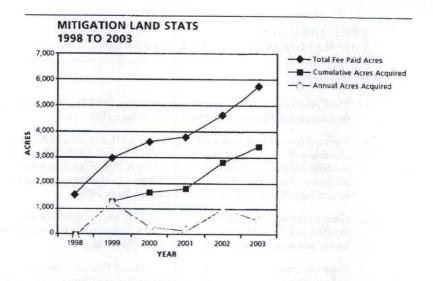
- The Conservancy acquired four (4) farms totaling 613.224 acres in 2003. This brings the total number of farms acquired to date to nineteen (19).
- The total acres of land acquired has grown to 3,421.7. A total of 3,099.124 acres is allocable to the City of Sacramento's participation in the NBHCP, and 316.749 is allocable to Metro Air Park's participation in the MAPHCP, of which 200 acres is supplemental mitigation. There are an additional 5.758 acres of conservation easements and one-tenth of an acre for other mitigation, both not required by an HCP.
- Great strides were made in reserve consolidation, including having assembled one contiguous tract of 1,324.274 acres. This means the Conservancy is well past the halfway point in having met its 2,500-acre contiguous tract requirement.
- Phase One environmental reports, American Land Title Association (ALTA) land surveys and aerial photographs were completed on each of the Conservancy's land acquisitions.

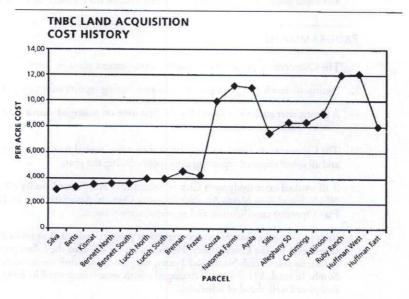
#### PROGRAMMATIC

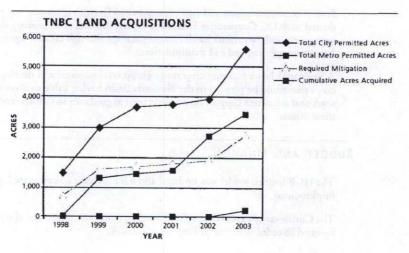
- The Conservancy prepared site-specific management plans in 2003.
- Swainson's hawk and giant garter snake monitoring reports were completed.
- A giant garter snake was found for the first time on managed marsh constructed by the Conservancy.
- The Conservancy issued a timely implementation annual report, budget, financial audit and all other required reporting documents during the year.
- Staff worked extensively with City of Sacramento and Sutter County officials on a revised NBHCP and with Metro Air Park Property Owners' Association on its HCP to facilitate Plan Operator coordination and implementation issues.
- Restoration and enhancement construction projects embarked upon in 2003 were the largest ever for the Conservancy. Projects were initiated on the following tracts: Natomas Farms, Souza, Lucich North and Frazer, with on-going work on Bennett South and Lucich South. In total, 391.6 acres of managed marsh were constructed in 2003, all of which were completed well ahead of schedule.
- Several communications and two personal visits (including on-site inspections) were conducted with UC Cooperative Extension experts in 2003. The primary discussion involved ways to expand Swainson's hawk foraging acreage through creative agronomic practices, water management and soil manipulation.
- A Swainson's hawk foraging crop study group was convened and developed a hierarchy of crops that could be planted in the Natomas Basin having value to Swainson's hawk. The work and attendant support literature is used as guidance to Conservancy land management efforts.

#### BUDGET AND FINANCE

- The HCP finance model was updated and a fee increase was requested, granted and implemented.
- The Conservancy's endowment fund account continues to grow, and remains conservatively invested in order to insure its long-term viability.







# THE NATOMAS BASIN CONSERVANCY

# ANNUAL REPORT 20031

- I. IMPLEMENTATION AGREEMENT SECTION 5.2
- The number of acres of land within the Permit Area approved for Urban Development during the previous calendar year for which fees were collected.

During 2003, the number of acres of land within the permit area for which fees have been paid was 1,241.98. A full report on the number of acres permitted for urban development can be found in Appendix A. A report from the City of Sacramento's Accounting Department shows a schedule of acres for the covered period for which fees have been paid. The mitigation acreage is also mapped, and these maps can also be found in Appendix B.

TABLE 1
THE NATOMAS BASIN CONSERVANCY
HCP FEE-PAID ACRES

 PERIOD	HCP FEE PAID ACRES*	
Through December 31, 1998	1,515.66	
January 1-December 31, 1999	1,465.47	
January 1-December 31, 2000	598.07	
January 1-December 31, 2001	242.09	
January 1-December 31, 2002	777.81	
January 1-December 31, 2003	1,241.98	
All years through December 31, 2003	5,641.09	

- Some mitigation land was dedicated in lieu of paying the Acquisition Fund portion of the NBHCP fee. Metro Air Park has paid fees on 190.4 acres, representing 100% of its Initial Phase, Tier 1 development. It has added 200 acres of mitigation land, and with its regular mitigation (116.763 acres), accounts for 316.763 mitigation acres (see totals for Huffman East and Huffman West tracts).
- An estimate of the amount of land within the Permit Area actually grubbed or graded for Urban Development during the previous calendar year.

This City of Sacramento-provided information can be found along with the maps and related material in Appendix A. Metro Air Park designated 190.4 acres (MAP Initial Phase, Tier 1) as the number of acres graded for Urban Development in 2003.

The aggregate number of acres of Conservancy Land acquired in fee simple or encumbered with Conservation Easements by the Conservancy during the previous calendar year. The listing shall show the acreage and the proportion of lands which are Managed Marsh.

Highlighted text (bold or italies) follows the Natomas Basin. Habitat Conservation Plan (NBHCP) and Implementation Agreement (IA) reporting requirements or guidelines. One exception is that illustrations may have headers and titles in bold which are not designated in the NBHCP or IA.

An accounting of the number of acres of Conservancy Land acquired in fee simple follows in Table 2. The listing showing land converted to Managed Marsh can be found in Table 3. The number of acres in managed marsh, uplands and rice approximately match the 25/25/50 acres allocation prescribed in the NBHCP.

All Conservancy land acquired to date has been by fee simple acquisition, although at year's end, a conservation easement for a small amount of land owned by Reclamation District 1000 was completed. This conservation easement was necessitated by restoration and enhancement construction (managed marsh) on adjacent land. These easements total 4.6352 acres next to the Lucich South tract and 1.1227 acres next to the Bennett North tract. The acreage totals are used as an integral part of adjacent managed marsh projects constructed and managed by the Conservancy, but are not counted in the mitigation acreage totals found in Table 2. At the end of 2003, the Conservancy had completed its third year of managed marsh construction and is well on the way to conducting additional such conversions during 2004.

TABLE 2
THE NATOMAS BASIN CONSERVANCY
LAND ACQUISITION TALLY THROUGH 12.31.03

and the late for sol both	PROPERTY	DATE ACQUIRED	ACRES
	Silva	1.7.99	159.200
	Betts	4.5.99	138.992
	Kismat	4.16.99	40.293
	Bennett (C.L.)	5.17.99	226.675
	Bennett (H&B)	5.17.99	132.486
	Lucich North*	5.18.99	267.986
•	Lucich South	5.18.99	351.889
	Brennan	6.15.00	241.376
	Frazer	7.31.00	92.600
	Souza**	7.2.01	44.680
	Natomas Farms	7.9.01	96.460
	Ayala	2.20.02	317.3674
	Sills	7.15.02	575.5559
	Alleghany 50	11.7.02	50.2601
	Cummings	11.7.02	66.8307
	Atkinson	6.12.03	205.397
	Ruby Ranch	6.23.03	91.078
	Huffman West***	9.30.03	181.003
	Huffman East	9.30.03	135.746
	Total***		3,415.8751

Earlier-stated possible reduction of the Lucich North of 20.68 acres owing to a claim by the Sacramento Area Flood Control Agency (SAFCA) has been resolved and 20.68 acres is now fully countable. A flood control easement exists on 2.5 acres of the Lucich North tract in favor of SAFCA.

The Conservancy adopted additions to its site-specific management plan (see Appendix K) in June 4, 2003 as additional mitigation lands were acquired and planned. The Conservancy conducted its largest ever restoration and enhancement construction season during 2003. Conservancy Board resolutions #03.03.04, #03.03.05, #03.09.04, #03.12.02 authorized construction activities on the Natomas Farms and Souza tract restoration and enhancement projects. Conservancy Board resolutions #03.05.04, #03.05.05, #03.12.02, pertained to restoration and enhancement construction authorization on the Lucich North and Frazer tracts. Resolution #03.12.02 included finishing authorization for restoration and enhancement work

<sup>\*\*</sup>Agreement of Purchase and Sale requires 3.68 acres can be purchased back from the Conservancy on this parcel.

<sup>\*\*\*</sup>The Huffman West tract and 19 acres of the Huffman East tract is for supplemental mitigation required by the Metro Air Park HCP. Without this, the total would be 3,215.8751. A further detailing of mitigation acreage can be found in Table 4.

on the Conservancy's Bennett South preserve. In all, 391.6 acres of managed marsh were included in the 2003 restoration and enhancement construction effort. (Greater detail on Conservancy Board resolutions can be found in Appendix P ("Minutes Recap") which lists all Board resolutions for 2003.)

For the future, the Conservancy's Board adopted resolution #03.09.02, which authorized commencement of the preparation of the site-specific management plan for the Ruby Ranch tract, and resolution #03.09.03 to do the same on the Atkinson tract. Site-specific land management plans were also authorized and begun on the Conservancy's Huffman East and Huffman West tracts (Board resolution #03.11.06).

TABLE 3
THE NATOMAS BASIN CONSERVANCY
MANAGED MARSH'/RICE/UPLAND TALLY

Tracts	surveyed acres	managed marsh planned <sup>b</sup>	managed marsh completed	rice <sup>c</sup>	upland	total of all planned uses
2001 Construction						
Betts/Kismat/Silva	338.48	192.51	192.51	0.00	145.97	338.48
Brennan	241.37	3.86	3.86	0.00	237.51	241.37
2002 Construction	or book yes I	System to	thal yahr	Table Const		
Lucich South <sup>2</sup>	351.89	16.45	16.45	334.00	1.44	351.89
Bennett North <sup>3</sup>	226.68	9.24	9.24	216.93	0.51	226.68
Bennett South	132.49	22.74	22.74	80.70	29.05	132.49
2003 Construction				1000		
Lucich North 267.99 247.		247.31	0.00	0.00	20.68	267.99
Frazer	92.60	92.60	0.00	0.00	0.00	92.60
Natomas Farms 96.46 36.20		36.20	0.00	0.00	60.26	96.46
Souza <sup>4</sup>	44.68	0.00	0.00	0.00	44.68	44.68
2004 Construction	lan en le	erie de arre	nscince 200y	lide 88.00.		
Alleghany 50	50.26	0.00	0.00	0.00	50.26	50.26
Cummings	66.8307	25.00	0.00	0.00	41.83	66.83
Ayala	317.3674	20.00	0.00	282.30	15.07	317.37
Sills	575.5559	50.00	0.00	490.00	35.56	575.56
Total	2,802.6511	677.40	636.40	1,443.22	682.02	2,802.65
		24.17%	at no to	51.49%	23.33%	100.00%
Not yet scheduled	Intain or	e tao ni bu	State of the	osing news		
Atkinson <sup>5</sup>	205.39	0.00	0.00	49.99	155.40	205.39
Ruby Ranch <sup>5</sup>	91.0780	25.00	0.00	0.00	41.83	66.83
Huffman West <sup>5,6</sup>	181.0030	20.00	0.00	282.30	15.07	317.37
Huffman East <sup>5,7</sup>	135.7460	50.00	0.00	490.00	35.56	575.56
		715.91	244.80	1,403.93	682.82	2,802.65

Managed marsh includes "associated uplands" as provided for in the NBHCP.

Fallow rice ground is counted in "rice" and not "upland" even though some upland benefits accrue.

5 The"

b "Managed marsh planned" represents managed marsh in approved SSMPs; those tracts in the "not yet scheduled" category are approved in an SSMP but have not been scheduled for construction.

<sup>1</sup> Lucich North actual surveyed acres @ 267.986 subject to 2.5-acre easement in favor of SAFCA.

<sup>2</sup> Lucich South managed marsh acreage does not include 4.6352-acre conservation easement which would add to totals.

<sup>3</sup> Bennett North managed marsh acreage does not include 1.1227-acre conservation easement which would add to totals.

<sup>4</sup> Exact allocations on the Souza tract is subject to a small "sale-back" provision.

<sup>6</sup> This is supplemental mitigation attributable to MAPPOA and is dedicated to Swainson's hawk upland.

<sup>7</sup> MAPPOA agreement states that 19 acres of Huffman East will be used for supplemental mitigation with Huffman West.

Additionally, with respect to showing the percentage of Conservancy-owned land in managed marsh, the Conservancy has generally attempted to avoid large concentrations of managed marsh development in the Swainson's hawk zone. This is primarily for two reasons. First, the Conservancy uses Swainson's hawk zone land judiciously because only so much of the Natomas Basin's 54,000 acres lie close to the Sacramento River and its existing populations of Swainson's hawks. It would be unfortunate to permanently convert land uses out of Swainson's hawk foraging into less desirable Swainson's hawk land uses given this strategic location. Therefore, it is projected that in the immediate future, the 25 percent "uplands" portion of the NBHCP's 25/25/50 land use allocations will be more heavily weighted towards upland. This strategy is a concerted effort to "lock in" the most sensitive and rarest of habitat types while they remain available, and further, to not take action that would reduce land uses that are valuable to the Swainson's hawk. The second reason is to comply with the NBHCP's requirements to coordinate efforts with Sacramento International Airport. The Airport has expressed its desire to minimize large bodies of open water in the flight zone areas of the Sacramento International. During 2003, all Conservancy land acquisitions were located in this Swainson's hawk zone.

A description of any lands conveyed by the Conservancy to the USFWS, CDFG, any other governmental entity, and to any other person or entity during the previous year.

The Conservancy has not conveyed any land to the USFWS or CDFG. As to other governmental entity conveyances, there was a conveyance in 2003, and this was the first ever such conveyance for the Conservancy. This amounted to granting a 2.5-acre flood control easement to the Sacramento Flood Control Agency (SAFCA) on the Conservancy's Lucich North tract. However, in doing so, the Conservancy acquired a total 20.68 acres which it would have lost. The terms of the agreement of purchase and sale ("AP&S") on the Lucich North tract called for the Conservancy to surrender the 20.68 acres to SAFCA upon consummation of an already-in-progress transaction between the seller of the Lucich North tract and SAFCA. Rather than forfeit the entire 20.68 acres as was required in the AP&S, the Conservancy negotiated with the seller and SAFCA, with the result being the Conservancy's ability to own fee title to the entire 20.68 while encumbering 2.5 acres of the total 20.68 acres with the above-mentioned easement.

While not a conveyance from the Conservancy to a governmental entity, it seems appropriate to report on conveyances from a unit of government to the Conservancy in 2003. The Conservancy acquired a 4.6352-acre and a 1.1227-acre conservation easement from the Reclamation District 1000 on land immediately contiguous to the Conservancy's Lucich South and Bennett North tracts. Both properties were a part of managed marsh restoration and enhancement construction projects, and in order to take full advantage of the existing and known giant garter snake populations in the North Drainage Canal, and capitalize on the opportunities to utilize these populations to colonize the new managed marsh projects, certain structural changes were needed. Working cooperatively with the Reclamation District, the changes were made and the conservation easements were granted, resulting in successful managed marsh construction. The Conservancy was not obligated to pay the Reclamation District for these easements, since the Reclamation District used the acreage as approved mitigation for pumping plant renovations in the Natomas Basin.

See discussion in number three (3) above, especially Table 3. More detailed information on each property acquired by the Conservancy can be found below:

<sup>5.</sup> A summary of the total aggregate number of acres of Conservancy Lands owned in fee simple or encumbered with Conservation Easements in favor of the Conservancy as of the end of the previous calendar year. The summary listing shall show the acreage and the proportion of lands which are Managed Marsh.

<sup>&</sup>lt;sup>1</sup> The entire 20.68 acres is counted in the Conservancy's mitigation acreage count.

TABLE 4
THE NATOMAS BASIN CONSERVANCY
LAND INFORMATION DETAIL
(italicized text in the Property column represents Supplemental Mitigation)

Property	Acquire Date	Acres	HCP/ Status	Williamson Act	Exceptions	NWC Stock	Sacramento County	Sutter County	SH
Silva	1.7.99	159.2	NB				155.309	3.891	
Betts	4.5.99	138.99	NB		MATE AND		121.782	17.21	
Kismat	4.16.99	40.29	NB	16.50	100		40.293		
Bennett North	5.17.99	226.675	NB	8	The same	N. Pal		226.675	
Bennett South	5.17.99	132.486	NB	8		358		132.486	Ø
Lucich North*	5.18.99	267.986	NB	8	Idiro unit	- 10	Variation of the second	267.986	
Lucich South	5.18.99	351.889	NB	8	g amplygn	620		351.889	Ø
Brennan	6.15.00	241.376	NB					241.376	
Frazer	7.31.00	92.6	NB	8		92		92.6	
Souzab	7.2.01	44.68	NB	8		drf	42	44.68	0
Natomas Farms	7.9.01	96.46	NB	A CONTRACTOR	Posto in	D.a	96	96.46	0
Ayala	2.20.02	317.367	NB				312	317.367	
Sills	7.15.02	575.556	NB	er comb	evil you		619	575.556	
Alleghany 50	11.7.02	50.260	NB	BR TYPE	malart.		51	50.260	0
Cummings	11.7.02	66.831	NB	THE PARTY	in Smooth is	2008	67	66.831	0
Atkinson	6.12.03	205.40	NB		drf, erc	170		205.397	0
Ruby Ranch	6.23.03	91.078	NB	•	erc	91		91.078	•
Huffman West*	9.30.03	181.003	SUP	( Actual	egris luc	land,		181.003	€
Huffman East*	9.30.03	135.746	MAP	di santy	that I wil	136		135.746	€
RD1000@LUCS	9.15.03	4.635	SUP	n/a	ce	n/a		4.635	
RD1000@BENS	9.15.03	1.123	SUP	n/a	ce	n/a		1.123	
Total		3,421.6	The state of			2,657	1,468.6	1,953.1	
AT&T cell \$1674	P. M. T.	0.1	SUP	Lan Sa	Less	1			

<sup>&</sup>lt;sup>a</sup> Lucich North is encumbered in part by a flood control easement conveyed to SAFCA in 2003 which totals 2.5 acres.

Agreement of Purchase and Sale allows seller to partition 3.68 acres.

RD1000 received credit for certain mitigation projects, none required by an HCP. This is a conservation easement and is not fee simple. RD1000's North Drainage Comprehensive Drainage Plan – Phase II Corps of Engineers ID#199900530; U.S. Fish and Wildlife Service file 1-1-00-F-0030 (Plant 3 Expansion).

<sup>&</sup>lt;sup>d</sup> Airport Bayou location. Not HCP mitigation.

<sup>\*</sup> All of the Huffman West tract and 19 acres of the Huffman East tract is for supplemental mitigation for Metro Air Park.

<sup>⊗ =</sup> yes, after acquisition

<sup>⊕ =</sup> yes, at acquisition

Ø = yes, partially

drf = development rights forfeited

ce = property covered by conservation easement or similar easement

erc = emission reduction credit sold prior to acquisition

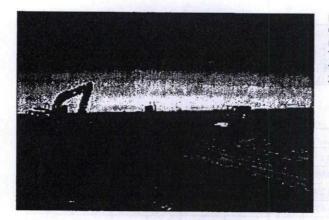


Figure 1. Summer 2003 Restoration and Enhancement Construction. The Conservancy began its third summer of restoration and enhancement construction on four reserves. The photo at right shows managed marsh construction on the Conservancy's Lucich North tract in Sutter County during 2003. Photo: The Natomas Basin Conservancy.

A description of the management activities which the Conservancy conducted during the previous year and the management activities proposed for the coming year.

Following the outline in the 1997 NBHCP page IV-40 ("Habitat management activities"), the following list is presented:

#### a. Control of water supply and availability.

The Conservancy continues its practice of developing back-up or standby water supply on all land where water supply availability is critical, and nearly all land in general. As always, a special focus is placed on the 25 percent of Conservancy land allocated to managed marsh. Rice fields were generally supplied with water as they were at the time of acquisition.

The newest water supply and control issues mostly impact the 25 percent of Conservancy land holdings that are either in or scheduled to be in upland land uses. The reason for this is that the Conservancy has begun to experiment with expanding the Swainson's hawk foraging opportunities on land having soils heretofore thought to be poorly drained or otherwise not appropriate for upland crops. In preparing for changed uses, particularly from rice to upland, the Conservancy relies on extensive geotechnical investigation in determining whether upland crops can be grown. If determined to be appropriate for such uses, a range of crops that might be beneficial to Swainson's hawk are considered.

Most recently, it has been determined that the planting and growing of irrigated hay crops and irrigated pasture on heavier clay soils may have more potential than earlier thought and expected. This primarily relates to the fact that in conventional agriculture, yields and crop losses are more likely when attempting to produce such crops on these heavier soils, thus impacting the profitability of such production. However, the Conservancy's goals of providing habitat for the Swainson's hawk, tri-colored blackbird, burrowing owl, loggerhead shrike and many of the grass, vernal pool and other covered species drives the economics in a different way. Provided that the heavier soil types can produce adequate crops, and do so reasonably dependably, the Conservancy can expand the range of upland habitat. Properly irrigating these land uses is critical, and therefore the Conservancy has moved to ensure water is available to serve these needs. If the experience proves promising, further water supply development will be indicated and the NBHCP upland species' habitat can be expanded still further.

A good example of this concept can be found on the Conservancy's Natomas Farms tract. Most of the overall acreage of the Natomas Farms tract was given over to rice production in the last several decades. After extensive soil testing, it was determined that while 51 acres of the property were appropriate for managed marsh, it would be possible for the balance of the property (approximately 45 acres) to be used for upland purposes, particularly an irrigated hay

crop or irrigated pasture or both. Since the tract was close to the Sacramento River and within the Swainson's hawk zone, the site-specific management plan calls for just such land uses. Therefore, the Conservancy reformed the water distribution system to take advantage of both surface water supplies and groundwater supplies, which will be provided by a new well designated for the site. The flexibility of having both water supply options affords maximum latitude and back-up against supply outages, water chemistry variances that might influence habitat uses and availability matters caused by timing (e.g., the Natomas Central Mutual Water Company discharges water conveyance structures periodically for repair). Therefore, with calculated water regime adjustments, upland species covered by the NBHCP will have additional acreage that heretofore had been dedicated to an aquatic crop, rice.

The ability to provide water for rice operations is also critical, especially given that 50 percent of land use allocations provided for in the NBHCP are in rice. Also, income from rice operations provides a large share of the revenue necessary for various Conservancy activities, including maintaining the managed marsh component and uplands. Accordingly, great care has been taken by the Conservancy with respect to acquiring and assuring full rights to water supplies as it acquires property for mitigation. Conservancy management has ensured stock in the Natomas Central Mutual Water Company is transferred to the Conservancy with all mitigation land acquisitions within the Water Company territory. The Water Company Board of Directors has approved all Conservancy's requests for the transfer of ownership, and stock certificates have been received as described above in Table 4.

The Conservancy staff continues to attend the Water Company's annual meetings and casts shareholder votes in the Conservancy's interest. At December 31, 2003, the Conservancy owns 2,657 shares of stock in the Water Company. This number represents approximately the number of acres of land owned by the Conservancy in the Water Company's service territory. The Conservancy also continues to explore with Water Company officials opportunities that exist for water provision to those tracts the Conservancy owns which do not hold water rights.

The Conservancy has been particularly active in attempting to obtain more information from the Water Company about its plans. The Water Company has announced pans to sell water to a third party for the purposes of providing water to municipal and industrial users. Moreover, the Water Company has announced plans to conduct a ground water development program. Both announced projects concern the Conservancy a good deal. To date, the Conservancy has been unable to obtain the information it deems is adequate to know more about these developments.

b. Suitable agricultural practices (e.g., rice growing for giant garter snakes and production of other crops for Swainson's hawk foraging).

Conservancy staff regularly talks with rice farmers, pest control advisors and extension service personnel about farming in ways that are supportive of giant garter snake and Swainson's hawk and other covered species populations. Much of the results of these efforts are outlined in the site-specific management plan applicable for the subject site.

Meeting notes from communications with UC Cooperative Extension experts can be found in Appendix M. Several communications and two personal visits (including on-site inspections) were conducted with UC Cooperative Extension experts in 2003. The primary discussion involved ways to expand Swainson's hawk foraging acreage through creative agronomic practices, water management and soil manipulation, particularly in soils that were not especially conducive to planting and growing Swainson's hawk-friendly crops.

Additional discussions were engaged in by an ad hoc team meeting with Conservancy sraff. The Swainson's Hawk Forage Preference Working Group conducted a literature search hoping to establish a better understanding of crops that could be planted to make prey generally better available to Swainson's hawk. See Appendix L ("Scientific Literature Search, Swainson's Hawk Foraging Habitat and Prey").

TABLE 5
THE NATOMAS BASIN CONSERVANCY
EXPECTED "MOST FAVORED" SWAINSON'S HAWK FORAGING CROPS\*

Сгор	Favorable to Prey Base	Expected Forage Access Value	Combination
alfalfa	5.00	5.00	5.00
clover (i)	5.00	4.50	4.75
pasture, irrigated	4.75	4.00	4.38
vegetables (ii)	4.50	4.00	4.25
tomatoes	4.25	3.25	3.75
grain, NEC (iii)	4.00	3.00	3.50
pasture, dry	3.75	3.00	3.38
sudan grass	3.75	2.75	3.25
strawberries	3.25	2.75	3.00
melons (iv)	3.25	1.75	2.50
beans, dry	3.25	1.75	2.50
sorghum	2.75	1.75	2.25
safflower	2.25	1.50	1.88
rice	2.00	1.25	1.63
cotton	1.75	1.25	1.50
orchard	1.50	1.00	1.25
vineyard	1.25	1.00	1.13
corn	0.50	0.50	0.50

- (i) includes vetch, berseem and assumes surface irrigation and multiple harvests per season
- (ii) includes carrots, lettuce, broccoli, cauliflower, etc.
- (iii) grains, not elsewhere classified, includes wheat, oats, barley, triticale, etc.
- (iv) includes cantaloupe, honeydew, watermelon, pumpkin, etc.

#### \*Assumptions

- all grain and seed crops (clover, wheat, barley, rice, etc.) will have high food value for microtus
- does not consider timing aspects of crop harvest (e.g., a crop with three days/year of harvest activity vs. a crop with more frequent and
  thus sustained value)
- value range scales from dry, bare land as zero (lowest) and surface irrigated, frequently-harvest alfalfa at five (highest); values are subjective based upon perceived value

Table 5 also shows the preliminary assessment of the Swainson's hawk foraging crop study group with reference to a hierarchy of crops that could be planted in the Natomas Basin having value to Swainson's hawk. The assessment remains a work in progress, but has already been helpful to the Conservancy in preparing site-specific management plans and with some of the experimentation it has conducted to determine planting preferences.

The Conservancy's earlier work on giant garter snakes has also generated some results. Though three years was given for the target for giant garter snakes to appear on the Betts, Kismat and Silva preserves after restoration and enhancement construction, a juvenile snake was captured and tagged on the site by U.S.G.S. scientists working under contract with the Conservancy (see Figure 8) during year two. Giant garter snakes have been found consistently in the drainage ditch on the western border of the Conservancy's Silva tract, near the water discharge structure the Conservancy installed to drain the managed marsh preserve.

The Conservancy continues to enhance rice farming's contribution to species mitigation. The efforts largely involve the following:

- 1. Selection of informed, first-rate rice farming contractors. Using its discretion as a private, non-profit corporation, the Conservancy works to affiliate with rice farmers who care greatly about conservation issues and who work toward making rice production as helpful to species mitigation efforts as possible. These farmers are more likely to take extra steps to fulfill the goals of the NBHCP and occasionally make recommendations on how to best accomplish mutual goals. They work with the Conservancy to make the most of the interface between rice farming and managed marsh, as several rice farms discharge prey-rich (for GGS) rice tailwater directly onto the Conservancy's managed marsh areas. All are motivated to accomplish biological goals in support of the NBHCP.
- 2. Grower participation in mortality avoidance and reporting. All Conservancy farming contracts now contain a provision that requests the farmer make an effort to observe and report GGS and Swainson's hawk on and around the Conservancy land they are farming.
- 3. Conservancy farming leases. The Conservancy's leases provide several provisions that make rice farming throughout the Conservancy's mitigation land holdings more sensitive to GGS safety. These include requirements regarding seeking appropriate balances with respect to rodent control, vegetation management and specific references to farm chemical safety, for example. Most importantly, as more is learned and GGS habitat needs are further defined, future leases can be adapted to accommodate new information and thus influence rice farmer activity in the most beneficial manner. The Conservancy's faming leases also require adherence to the University of California Regents' publication, "Integrated Pest Management for Rice, Second Edition" handbook. Integrated Pest Management (IPM) attempts to use the least amount of chemicals and disruptive practices necessary to farm economically. The IPM rice farming principles and protocols are fortified by the research and direction of some of the world's leading rice scientists, many of whom are affiliated with the University of California and the International Rice Research Institute. In sum, adhering to these practices and principles minimizes disruption, improves water quality and creates a more sustainable rice farming environment.
- 4. GGS monitoring results and identification of sensitive locations. Still further data has been added to the Conservancy's knowledge as the locations of GGS become better known in the Basin. The Conservancy uses the monitoring information to alert farmers and others of the need for caution in those areas where GGS are found. The Conservancy has seen excellent compliance with its farmer-contractors in observing and avoidance of incompatible activity in these identified areas. Farmers working for the Conservancy have also begun to identify other NBHCP covered species, such as the western pond turtle.
- Conservancy fallowing program adapted to include further dual benefit for GGS, Swainson's hawk and other covered species. The Conservancy has now moved its rice land fallow program into an experimental effort. The experiment involves seeing if the fallowed rice ground can be maximized for both rice sustainability (crop rotation avoids monocrop effects, including persistent plant disease problems, resistant weeds, overwhelming insect damage, soil nutrient depletion, etc.) and also afford a certain degree of benefits for the Swainson's hawk and other covered species. An example is the southerly portion of the Conservancy's Sills Ranch tract. On this rice land, the farmers contracting with the Conservancy have been induced by the Conservancy to plant and grow an irrigated hay crop, This involved the planting of rye in the fall of 2003, followed by an early harvest in 2004. This is immediately to be followed by the planting and then frequent harvesting of berseem (an irrigated hay crop). In this manner, a number of opportunities for Swainson's hawk to forage for microtus exists due to the more frequent chopping, planting and surface irrigation activities on the parcel. Traditionally, these rice soils are not conducive to economical hay crop production. But using creative agronomic practices, lowering of the financial break-even point for the farmer, and the timing of farming activity, the Conservancy believes this will be an excellent opportunity to use rice land for multiple covered species benefits.

6. Farming practices changed. Conservancy's management meets with the aerial applicators serving the Natomas Basin and informs them of the sensitive areas to be avoided. These coordination meetings have proven valuable in minimizing the potential disturbances which could deter species mitigation, especially during sensitive time of the year. The Conservancy continues to see excellent cooperation by these aerial applicators.

7. Preserving the "sanctuary" aspects of Conservancy-controlled lands for the benefit of the covered species. A theory behind the NBHCP is that as habitat is lost to development, the covered species displaced by this development can take refuge on Conservancy preserves. The Conservancy controls access to its land like no other farm landowner in the Natomas Basin. The amount of gates, fencing and signs erected in 2003 exceed previous years, all for the purpose of minimizing habitat disturbance. Housing that exists on the Betts and Silva tracts have been used to recruit tenants having a functional affiliation with the Conservancy's mission. This has helped tremendously in controlling poaching, trespassing, dumping and vandalism. This led to a change in Conservancy thinking during 2003. Previously, the Conservancy believed that residential structures on Conservancy land were a management and maintenance burden. Once Conservancy management took the time to consciously select tenants for the two aforementioned residences who had an interest and ability to help protect the surrounding preserves, significant improvement have been seen in disturbance and nuisance reduction. Since existing farmers have less concern about habitat disturbance, they have somewhat less concern about these issues. Certainly, they do not generally support trespassing, poaching, dumping and other illegal activity. However, they have less to lose than the Conservancy, since the Conservancy must be concerned about the very same property issues conventional farm land owners do, but also must be alert to habitat disturbance avoidance. The year 2003's efforts in property management have been an improvement in the use of Conservancy farmland for NBHCP covered species' benefit.

(See subsections "c," "f," and "g" below for additional agricultural practices which support Swainson's hawk.)

## c. Grazing programs to eliminate weeds or control vegetation.

The Conservancy embarked upon an aggressive discovery effort in 2003 with respect to vegetation management. The report found in Appendix Q, titled, "Vegetation Management and Livestock Grazing: Betts, Kismat and Silva Site, The Natomas Basin Conservancy, 2003 Progress Report," characterizes these efforts. The Conservancy engaged in this study to accomplish several objectives. The most important was to find ways to further reduce mechanical, chemical and human intervention to the lowest degree practical. The second was to identify the appropriate livestock for the vegetation management task.

Earlier efforts had proven that the use of livestock was helpful in controlling exotic weeds, providing a greater opportunity for success by the native vegetation planted by the Conservancy. Livestock were also helpful in maintaining an ideal vegetation height so that Swainson's hawks could forage. The livestock had already proven valuable to tricolored blackbird and burrowing owl success on the Betts, Kismat and Silva tracts.

The key to the vegetation management efforts in 2003 was to apply management intensive rotation grazing (MIRG), and to do so in such a manner that the right animal was applied to the right vegetation. For example, the Conservancy keeps cattle well away from watered areas, knowing of their propensity to wallow in these areas, to disturb the shoreline and for animal waste to contaminate the waterway. Therefore, the Conservancy experimented with sheep in 2002 and goats in 2003, and found the goats provided excellent vegetation management in these areas. Similarly, the refined, purebred cattle that have been on the property since 2000 seemed far too selective for eating down some of the tougher vegetation on the site, but do an excellent job on the irrigated pasture areas critical to the tri-colored blackbird. Therefore,

Longhorn and Watusi cattle were introduced to the site in 2003. These cattle did a much better vegetation management job in the drier, weedier areas of the preserve. And since there has been some livestock loss to canines on the property, the Watusi and Longhorn cattle seemed well-suited to deterring over-aggressive livestock predation.

As the Conservancy sees continued success in this experiment, it will expand the successful practices to other Conservancy land.

Finally in this respect, the Conservancy's aggressive restoration and enhancement efforts in 2003 found further fenced areas on upland sites well suited to grazing activity. The Natomas Farms and Souza tracts were completely fenced in 2003. This will help the upland portion of these properties provide the maximum management flexibility for the benefit of the Swainson's hawk.

#### d. Exotic species control.

The Conservancy's action to address exotic species control has changed as the Conservancy's land holdings have grown. The biggest change is the amount of labor necessary to contain exotic plant species. The management intensive rotation grazing discussion above is one such labor-intensive, yet successful example. Clearly, on the Conservancy's Betts, Kismat and Silva tracts, there would continue to be a massive quantity of bull thistle and yellow star thistle without these aggressive efforts. Both plants heavily infested the site upon acquisition. The first control activity on the sites involved stubble disking a border around the worst areas, then also disking 40-foot swathes at intervals through the affected fields. Then vetch was aerial seeded on the site. Subsequent winter rains provided the moisture for the vetch to climb on the previous year's remains of the thistle and shade out new growth. Then cattle were introduced on the site, and consumed much of the vetch and remaining thistle. This experiment proved very educational for the Conservancy.

Following this experiment, the Conservancy engaged in extensive restoration and enhancement activity on the site. The resulting construction activity again brought about exotic weed growth. Where the livestock grazing did not move quickly to contain exotic vegetation, on-site Conservancy contractors used low-impact mechanical means (hand-held trimmers such as the Weed-Eater®) and very selective use of herbicide. However, livestock grazing has been effectively used to control exotic vegetation on over 99 percent of the site.

The extensive exotic species control efforts are directed at giving the planted native vegetation a competitive advantage. It is expected that after a few years of establishment, the native vegetation will be mature enough that the exotic species will need less attention.

Exotic vegetation control activities were the most pronounced on the Conservancy's Betts, Kismat, Silva tracts plus all other tracts having managed marsh constructed on them. (See Table 3 for a list of Conservancy preserves having managed marsh.)

As to non-plant exotic control, there was little to report in 2003 other than that found in subsection "h" below. The Conservancy continues to attempt to control feral cats that frequent the project site, but to date have been unsuccessful in either capturing or deterring them. It is clear, however, that populations of feral cats have not grown. It is possible that resident populations of coyotes have helped with population control.

#### e. Erosion control.

Since much of the Conservancy's land is in rice agriculture, and since the rice fields have been precision-leveled, there are relatively few erosion control needs or opportunities on current Conservancy land holdings. On the portion of the Conservancy's land that is not in rice

production, pasture is the most prevalent land use. Therefore it too, with its ground cover, relative flatness and being well developed with agricultural drains, offers little opportunity or need for erosion control efforts.

The Conservancy's managed marsh complexes are specifically designed to reduce erosion, and the Conservancy expects there to be few erosion challenges around these complexes. In order to control the substantial amount of water flowing through managed marsh components of the Conservancy's reserve system, the Conservancy has invested in water control structures that are extremely durable. The adjoining earthen structures are engineered for high integrity, and the Conservancy has moved quickly to identify and repair any potential weaknesses in these structures.

#### f. Enhancement of native plant communities.

The Conservancy continues, now for the second year, planting a number of native plants on its preserves. The plantings are in accordance with the guidelines provided for in the NBHCP, and their placement is spelled out in the individual site-specific management plans for the various reserves. These are reviewed by the Conservancy's consulting wildlife biologists, reviewed and approved by the Conservancy's Board of Directors, and submitted to the NBHCP TAC for review and approval through the site-specific management plan approval process.

In addition, pursuant to a requirement in the 2003 NBHCP, the Conservancy was obligated to begin the process of planting 60 additional trees for Swainson's hawk mitigation. By an arrangement with Alleghany Properties, Inc. dated October 9, 2003, the Conservancy began getting funding for the first 15 of these trees. These were subsequently planted with additional native species trees.

Table 4 shows the native trees and shrubs the Conservancy planted on this year's restoration and enhancement construction projects.

#### TABLE 6

THE NATOMAS BASIN CONSERVANCY
NATIVE TREES AND SHRUBS PLANTED IN 2003 ON CONSERVANCY
PRESERVES

#### Betts, Kismat and Silva tracts

Remedial tree planting:

Cephalanthus occidentalis, Button willow, 4 Platanus racemosa, Sycamore, 39 Quercus lobata, Valley oak, 44 Vitus California, Wild grape, 44

Additional tree planting: Quercus wislizenii, Interior live oak, 2

#### **Bennett North tract**

Original riparian planting:

Baccharis pilularis, Coyote brush, 2
Baccharis salicifolia, Mulefat, 2
Cephalanthus occidentalis, Button willow, 7
Platanus racemosa, Sycamore, 2
Quercus lobata, Valley oak, 2

Rosa californica, Wild rose, 7 Rubus ursinus, California blackberry, 11 Salix exigua, Sandbar willow, 17 Salix lasiolepis, Arroyo willow, 17

Remedial tree planting:

Baccharis pilularis, Coyote brush, 2
Quercus lobata, Valley oak, 2
Rosa californica, Wild rose, 2
Salix exigua, Sandbar willow, 3

Upland Seeding (30 lbs/AC, 0.61 acres)
Bromus carinatus, Native California brome
Elymus glaucus, Blue wild rye
Festuca idahoensis, Idaho fescue
Hordeum californicum, California barley
Nassella pulchra, purple needlegrass
Poa scabrella, Pine bluegrass

Perennial Marsh Tule Planting (5.4 acres) 540 groups (ea. 18-24" diameter)

#### **Bennett South tract**

Upland Seeding (30 lbs/AC, 23 acres)

Bromus carinatus, Native California brome

Elymus glaucus, Blue wild rye

Festuca idahoensis, Idaho fescue

Hordeum californicum, California barley

Nassella pulchra, purple needlegrass

Poa scabrella, Pine bluegrass

Remedial Pasture/Grassland Upland Seeding (1
Elymus glaucus, Blue wildrye
Elymus multisetus, Squirrel tail
Elymus trachycaulus, Slender wheatgrass
Leymus triticoides, Creeping wildrye
Nasella pulchra, Purple needlegrass
Poa secunda, Pine bluegrass

Remedial Perennial Marsh Tule Planting Approx. 465 groups (ea. 18-24" diameter)

#### **Lucich South tract**

Original riparian planting:

Baccharis pilularis, Coyote brush, 6

Baccharis salicifolia, Mulefat, 6

Cephalanthus occidentalis, Button willow, 3

Platanus racemosa, Sycamore, 4

Quercus lobata, Valley oak, 17

Rosa californica, Wild rose, 7

Rubus ursinus, California blackberry, 4

Salix exigua, Sandbar willow, 10

Salix lasiolepis, Arroyo willow, 10

Remedial tree planting:

Baccharis pilularis, Coyote brush, 2
Baccharis salicifolia, Mulefat, 3
Quercus lobata, Valley oak, 1
Rosa californica, Wild rose, 7
Rubus ursinus, California blackberry, 2
Salix exigua, Sandbar willow, 7

Upland Seeding (30 lbs/AC, 5 acres)

Bromus carinatus, Native California brome

Elymus glaucus, Blue wild rye

Festuca idahoensis, Idaho fescue

Hordeum californicum, California barley

Nassella pulchra, purple needlegrass

Poa scabrella, Pine bluegrass

Perennial Marsh Tule Planting (9.2 acres) 920 groups (ea. 18-24" diameter)

#### **Lucich North and Frazer tracts**

Tree Planting:

Populus fremontii, Fremont cottonwood, 53
Salix goodingii, Black willow, 15
Quercus lobata, Valley oak, 37

Upland Seeding (22 lbs/AC, 62.32 acres)
Elymus glaucus, Blue wild rye
Hordeum californicum, California barley
Leymus triticoides, Creeping wild rye
Nassella pulchra, purple needlegrass
Poa scabrella, Pine bluegrass
Vulpia microstachy, Three-weeks fescue

Perennial Marsh Tule Planting (186.10 acres) 22,166 groups (ea. 18-24" diameter)

#### Souza and Natomas Farms tracts

Tree Planting

Populus fremontii, Fremont cottonwood, 15 Quercus lobata, Valley oak, 15

Berm & Riparian Seeding (30 lbs/AC, 8 acres)
Bromus carinatus, Native California brome
Festuca idahoensis, Idaho fescue
Hordeum californicum, California barley
Nassella pulchra, purple needlegrass
Poa scabrella, Pine bluegrass
Trifolium wildenovii, Tomcat clover (inoculated)
Vulpia microstachys, Three-weeks fescue

Grassland Seeding (25 lbs/AC, 43.4 acres)
Martin fescue
Tonga Tetra perennial ryegrass
Bison intermediate rye
PK Ladino clover
PK Salina strawberry clover
PK Broadleaf trefoil

("Beef & Sheep Mix" from Kamprath Seed Co.)

Perennial Marsh Tule Planting (36.2 acres) 3620 groups (ea. 18-24" diameter)

#### g. Habitat enhancement activities for the covered species (e.g., construction of artificial burrows for giant garter snake).

During 2003, the Conservancy engaged in the most extensive habitat creation effort since its inception. Major construction efforts took place on the Lucich North, Frazer, Natomas Farms and Souza tracts, with follow-up efforts on Bennett North and Bennett South.

See the site-specific management plans (Appendix K) for these sites to see a graphic presentation of the work conducted on each site.

#### h. Predator control.

The Betts, Kismat and Silva tracts were the scene of the slaughter of 19 goats employed on the tracts by the Conservancy for vegetation control. The deaths were caused by domesticated dogs roaming the area. Sacramento County Animal Control was contacted, and one of the three dogs was captured. As a result of the incident, the Conservancy's on-site contract manager has strengthened perimeter fencing. However, this makes an already labor intensive effort even more so. Nonetheless, the goats have performed well in vegetation management (see discussion above), and to date, the protective efforts have helped.

On numerous occasions, the Conservancy has contacted Sacramento County Animal Control to remove stray dogs left on the Conservancy's land and which roam the area. These control efforts have all been successful. The Conservancy continues to deal with occasional domestic dogs and cats being introduced onto various preserves. There has been an on-going problem with citizens abandoning their pets on farms, and the Conservancy's property is no exception.

#### i. Control of pesticide uses on reserve lands.

All Conservancy agricultural leases and right of entry agreements contain provisions specifying that the use of pesticides on Conservancy mitigation land is strictly controlled. In its own land management efforts, the Conservancy rarely allows pesticides to be used. Insecticide use has not been permitted on Conservancy-owned mitigation land with the exception of occasional use in active farming operations. Rice production generally does not require significant insecticide applications. In all such uses, contract farmers are required to employ IPM practices.<sup>3</sup>

See also previous discussions on efforts to reduce the use of herbicide (see subsection b, "Suitable agricultural practices," above).

## j. Enhanced ditch and drain management for the covered species on reserve lands.

Except with the restoration and enhancement construction project engaged in during 2003, there was little or no ditch or drain management activity. Previous years saw a number of communication and coordination efforts between the Conservancy and the Natomas Central Mutual Water Company and Reclamation District 1000. As the Conservancy's land holdings grow and as the restoration and enhancement sites mature, there will be additional reporting on these matters.

The Conservancy did conduct some drainage improvement around the Silva residence on its Silva tract in 2003. The Conservancy's Board of Directors determined to keep the residence rather than raze it because of the trespassing, poaching and other illegal activity on the site. The additional set of "eyes and ears" has helped control such activity. In retaining the residence, it was clear that the site no longer drained very well, and winter water flowed into the residence area. A small drainage improvement was constructed around the perimeter of the residence so that water drained off the site, protected the Conservancy's investment and also made for a more attractive situation for desirable tenants who would in turn help the Conservancy protect the surrounding preserve.

<sup>&</sup>lt;sup>2</sup> See Sacramento Bee article, "Goats attacked by dogs: Death of 11 animals called a setback but won't halt Natomas habitat effort," August 26, 2003, and an editorial in the Sacramento Bee on August 30, 2003, "Darwinism in Natomas: snakes and hawks can't go to the dogs."

University of California Regents' publication, "Integrated Pest Management for Rice, Second Edition" handbook. Integrated Pest Management (IPM) attempts to use the least amount of chemicals and disruptive practices necessary to farm economically.

k. Coordination of any research conducted within reserves with outside species experts and other individuals and groups.

The Conservancy engaged in considerable exploration regarding the preferred crop types for Swainson's hawk. The format was an informal group established by the Conservancy. The group is called the Swainson's Hawk Forage Preference Working Group. It is comprised of Conservancy Board members David Christophel and Mike Bradbury and NBHCP TAC member Jim Estep, all of whom are wildlife biologists, and Conservancy staff, John Roberts. See section 6b above for a further discussion of this group's activities as well as Table 5. See also Appendix L for an extensive presentation of a literature on the topic the Working Group conducted.

Additionally, Conservancy staff employed outside experts to help conceptualize the best approach to giant garter snake monitoring. The exercise was meant to unearth ideas on what an ideal giant garter snake monitoring program would look like. The discussion paper that resulted from this exercise (see Appendix T, GGS Monitoring Protocol Discussion Paper) helped set the stage for the request for proposal (RFP) that was drafted to begin the new biological effectiveness monitoring program as required in the 2003 NBHCP. The RFP can be found in Appendix U. The BEMP work plan can be found in Appendix V.



Figure 2. GGS Observed **Adjacent to Bennett** North. The GGS at right was observed in early Spring 2003 adjacent to the Conservancy's new managed marsh at the southeast corner of the Bennett South tract. The observation was made during an inspection of sites with representatives of the Conservancy's staff, Board of Directors and USGS giant garter snake experts. Photo: The Natomas Basin Conservancy.

The Conservancy continued its engagement of the Sacramento Tree Foundation to conduct a count of trees on Conservancy-owned land. That report follows as Appendix I. The report establishes a baseline tree count on Conservancy-owned lands and then allows a follow-up as to progress since then. As the many recently planted trees mature to a size that they can be counted as mature, and thus included in future tree census reports, there should be a very large change in the total number of trees on these properties over the years.

Additional giant garter snake monitoring work was done on the Conservancy's newly-acquired Atkinson tract. The purpose of the research was to obtain early information that would help

with site-specific management planning decisions. While this supplemental monitoring was not specifically a requirement of the NBHCP, the Conservancy conducted the work in order to make certain it could comply with the site-specific planning submission deadlines, to add certainty to its knowledge of the biological resources of the tract, and also add further accuracy with site-specific management plan preparation, site-development and long-term site management budgeting. The Atkinson tract is probably the most unique and biologically diverse tracts currently held by the Conservancy.

This supplemental giant garter snake monitoring work was conducted by Eric Hansen, consulting environmental biologist. The work can be found in Appendix X. The study confirmed giant garter snakes existed at the site, with two confirmed trappings in the highline ditch on the property's easterly border.

The Conservancy also engaged hydrology experts to provide the first of a two-year effort to ascertain with greater certainty the volume of water flowing into the Conservancy's Betts, Kismat and Silva preserves. The report can be found in Appendix Y. Flow measurements were taken in April and May of 2003. The tests confirmed flow volumes of 2,865 and 3,252 gallons per minute, respectively. Further measurements will be taken in 2004 in order to derive an averaged flow estimate. The results of the work are helpful in providing accurate water level management of the managed marsh reserve system on the property. Water level management is essential to provide the best possible environment for the giant garter snake and also to aid in effective aquatic vegetation management.

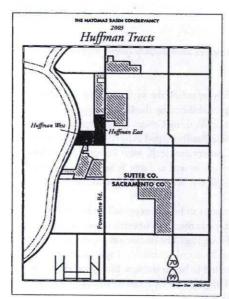


Figure 3. Acquisition of Huffman Tracts **Advances Consolidation** of Reserves. Acquisition of the Huffman East and Huffman West tracts in 2003 helped advance efforts to consolidate Conservancy land into contiguous preserves. The map above displays the two acquisitions and how they relate to existing land holdings in the surrounding area. Conservancy plans for 2004 include further efforts at preserve consolidation.

- The 2003 NBHCP is supported by permits issued to the Conservancy by the California Department of Fish and Game (issued July 10, 2003; permit number 2081-20032-019-02) and the U.S. Fish and Wildlife Service (issued June 27, 2003; permit number TE073667-0). These can be found in Appendix W.
- <sup>5</sup> Great strides were made in reserve consolidation during 2003, including having assembled one contiguous tract of 1,324.274 acres (see Figure 3). This means the Conservancy is well past the halfway point in having met its 2,500-acre contiguous tract requirement. The Conservancy now looks to further consolidate reserves around the North Basin Reserve Area, the Central Basin Reserve Area and the Fisherman's Lake Reserve Area (see Appendix D). This will assist with reserve contiguity, and at the same time, very likely assist with more effective land management.

#### I. Management activities proposed for coming year.

The year 2004 will be another year of rapid growth for the Conservancy. Management activity will be focused primarily in the following areas:

- refine and effectively manage new and start-up managed marsh projects
  resulting from the heavy restoration and enhancement construction schedule
  from 2003,
- implementation of the revised and more extensive 2003 NBHCP,<sup>4</sup>
- incorporation of an additional habitat conservation plan, the Metro Air Park HCP, into the Conservancy's program of work,
- initiating a new biological effectiveness monitoring program, effective January 1, 2004,
- absorb an expected large amount of new mitigation land into the Conservancy's land inventory,
- continue to patch together additional lands to further the string of successes in reserve consolidation,<sup>5</sup> and
- 7. extensive oversight of financial planning to ensure that the HCP fee is adequate to fully fund implementation efforts.

Given that the Conservancy's inventory of mitigation land has risen dramatically in the past few years (see Table 2), Plan implementation is coming much faster than expected, so the Conservancy will be working with all concerned to refine its work and make certain Plan implementation stays on tract.

A description of the habitat enhancement activities conducted in the previous year and those proposed for the coming year.

A discussion on enhancement activities conducted the previous year has been incorporated into several items above. Proposed habitat enhancement work for 2004 will largely be focused around a restoration and enhancement construction project on the Conservancy's Cummings tract, refinement of the large restoration and enhancement construction activities in 2003, and incorporating the newly acquired property into the reserve systems. Additional information can also be found in the revised and updated site-specific management plans (see Appendix K).

A report of any scientific research authorized or conducted in the previous calendar year on Conservancy Lands other than research conducted directly by USFWS or CDFG, and a description of any research proposed for the coming year.

See item section I.6 (k) above.

Research planned for 2004 falls primarily into the biological effectiveness monitoring effort described above, including, a.) monitoring for the giant garter snake, and 2.) monitoring for the Swainson's hawk and the comprehensive monitoring detailed in Appendix V.

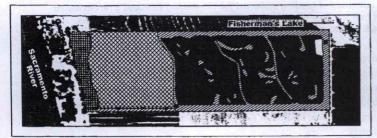


Figure 4, Restoration and Enhancement Project Slated for Conservancy's Cummings Tract. The plan shown above reveals the Conservancy's plans for the restoration and enhancement construction project on the Conservancy's Cummings tract in the southern portion of the Natomas Basin.

 An itemization, if known, of the number of individuals of the Covered Species taken by the Conservancy in the course of management, relocation, or scientific study, and the disposition of those individuals.

The Conservancy did not detect any incidental take of any of the covered species in the form of death or injury resulting from its restoration, enhancement and management activities. However, some individuals of the covered species may have been disturbed or harassed, and it is possible some

may have been injured but avoided detection during these activities. Management activities were mostly agronomic in nature, including water management, livestock management, crop cultivation, vegetation management, debris removal, etc., and took place on all of the land mapped and found in Appendix D. Substantial restoration and enhancement construction activities took place on the Conservancy's Lucich North, Frazer, Natomas Farms and Souza tracts (see referenced map in Appendix D), with some activity taking place as follow-up on last year's projects. These activities included earth moving, installation of water control structures, planting of vegetation, and other activities normally associated with construction of marsh. Measures the Conservancy has taken to avoid and minimize incidental take are those found in the NBHCP and the site-specific management plan for the site in question, all of which were observed by Conservancy staff and/or contractors. The Conservancy employs biologists to conduct on-site restoration and enhancement monitoring activities in order to detect take and ensure implementation of take avoidance and minimization measures. The Conservancy communicates and advises its lessee farmers (see Section 6b above, "Suitable agricultural practices") and contractors as to the importance of avoiding take and reporting it if and where it occurs.

No incidental take was reported by Conservancy monitors or others conducting activities on Conservancy land. Because these measures have been employed, the Conservancy believes any incidental take of the covered species has been minimized and avoided as much as possible, and that any take that occurred falls within the amount authorized in the Incidental Take Permit. Take that may have occurred as a result of scientific activities (such as capture and disturbance) are outlined in the monitoring reports found in Appendix F and G. Take of giant garter snakes as a result of scientific activities is also covered under separate federal permit under section 10(a)1(A) of the ESA. Monitoring of the Swainson's hawk was carried out under the terms of a Memorandum of Understanding between the Conservancy's contractor and the California Department of Fish and Game.

10. A yearly financial report prepared by a certified public accountant which provides: a tabulation of all Habitat Acquisition Fees and other Mitigation Fees collected by the Conservancy; all other sources of income to the Conservancy; all expenses incurred by the Conservancy during the previous year, including an itemization of all expenses incurred in land acquisition activities; the amount of funds held in reserve for future acquisitions; and the value of the endowment fund established from Endowment Fees.

In Appendix J, a financial statement for the Fiscal Year ended December 31, 2003 is presented. Audited financial statements are prepared each year and are generally available around early May. Once completed, copies are sent to the Wildlife Agencies and others.

On June 14, 2003 on the Conservancy's Frazer tract, a heavy equipment operator working on the restoration and enhancement construction project on the site observed an 18-inch giant garter snake in the middle of the construction area. Avoidance measures were immediately employed. A full accounting and map covering the issue can be found in Appendix R.

11. An assessment of the adequacy of funding projected for the coming year and a recommendation as to the amount that the Base Mitigation Fee should be increased or decreased as specified in Sections 4.5.7, 4.5.8, or 4.5.9 of this Agreement.

In Appendix N, the Conservancy presents a summary of the financial model update it requisitioned during the reporting period. The model indicated a need for an increase in HCP fees. Accordingly, the Conservancy adopted a resolution<sup>7</sup> requesting that the City of Sacramento increase HCP fees (see Table 6, HCP Fee History). The Sacramento City Council voted unanimously soon thereafter (June 24, 2003; resolution #2003-460) to accept this recommendation and implement it immediately.

The pattern and process for evaluating the need for fee adjustments, and then getting all the necessary authorizations to implement such adjustments, has become well established. As the Conservancy progresses with implementing the NBHCP, its ability to estimate costs is enhanced. This in turn helps produce yet more refined budgeting activity.

TABLE 7
THE NATOMAS BASIN CONSERVANCY
HCP FEE HISTORY

Year	Established Fee
1997	\$2,240
1998	\$2,656
1999	\$3,292
2000	\$3,942
2001	\$5,993 + \$4,028 premium = \$10,021*
2002	\$7,934 + \$4,028 premium = \$11,962*
2003	\$12,270 <sup>8</sup>
2004	\$16,124 <sup>9</sup>

<sup>&</sup>quot;HCP "premium" was established as a result of an agreement to settle litigation, FWS v. Babbitt.

# 12. Maps depicting items set forth under paragraphs (1), (2), (3), (4), and (5) above.

In Appendix A, the Conservancy provides maps of fees paid and acres graded as presented by the City of Sacramento and Metro Air Park. In Appendix D, maps of Conservancy mitigation lands are provided. In addition, the Conservancy has completed land surveys of all acquired mitigation lands. The surveys conform to American Land Title Association (ALTA) requirements and are available in the Conservancy's office.

<sup>&</sup>lt;sup>7</sup> Conservancy Board resolution #03060 adopted by unanimous vote on June 4, 2003.

Also established is a fee of \$7,770 per acre for fee obligations satisfied in part with land dedication.

Also established is a fee of \$8,624 per acre for fee obligations satisfied in part with land dedication.

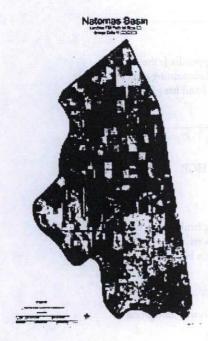


Figure 5. Aerial Photos of All Conservancy Lands Have Been Taken. The Conservancy has had aerial photos taken of all of its mitigation land. The photo at left is of the entire Natomas Basin, taken in September of 2003. The Conservancy acquires such basin-wide photos to allow tracking of its restoration and enhancement construction projects. The Conservancy's restoration and enhancement construction efforts can be seen in this photo, and include the Betts, Kismat, Silva, Bennett North, Bennett South and Lucich South tracts.

Other features include the Sacramento International Airport at left and the urbanized City of Sacramento in the lower portion of the photo. The Sacramento River runs along the left boundary of the photo, and the Natomas Cross Canal runs across the too.

The aerial photo can be viewed in larger format and downloaded by accessing the Conservancy's web site at www.natomasbasin.org. Photo: LANDSAT.

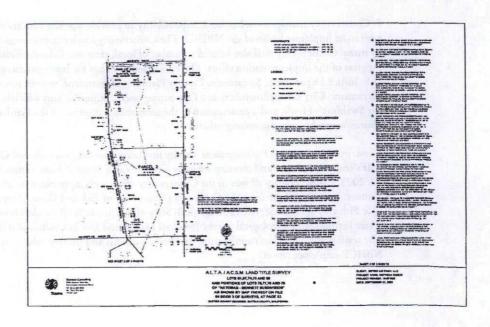
13. Copies of all data collected and reports generated as a result of scientific research conducted on Conservancy Lands.

Reports covering such work conducted during 2003 include, 1.) geophysical testing on the Conservancy's pre-construction tracts (see Appendix E), 2.) monitoring for the giant garter snake (see Appendix F) and a special giant garter snake

monitoring project (see Appendix X), 3.) monitoring for the Swainson's hawk (see Appendix G), and 4.) phase one environmental reports for newly acquired mitigation land (see Appendix H). A report taking a survey of all trees located on Conservancy-owned mitigation land can be found in Appendix I. Research conducted on water flows on the Betts, Kismat and Silva tracts can be found in Appendix Y.

ALTA surveys of newly acquired mitigation land were also completed and are on file with the Conservancy at its office.

Figure 6. ALTA Surveys Made of All Conservancy Lands. At right is an excerpt from the survey conducted on the Conservancy's Huffman East tract.



#### 14. An accounting of the long-term endowment account.

An accounting of the Conservancy's Endowment Fund can be found in Appendix J, the December 31, 2003 financial statement. More extensive detail of the fund accounting can be found in Appendix S, "Endowment Fund Accounting." The Endowment Fund has grown remarkably during 2003, now with a balance in excess of \$5 million.

#### 15. All other information described in Chapter IV, Section G.4 of the NBHCP.

See item number (6) above for a complete list of information listed in the HCP.

Other management activity included:

- 1. Occasional meetings or communications with adjacent and neighboring land owners to update them on the Conservancy's program and to discuss any other issues related to the land management activities going on in and around the Conservancy's mitigation lands.
- 2. Removal of illegally dumped debris on Conservancy-owned properties.
- 3. The Conservancy continues to install locks on all access gates on Conservancy mitigation land. It also controls trespassing and hunting on such lands as well.
- 4. Property tax management has taken a considerable amount of the Conservancy's time.
- 5. The Conservancy also manages participation in federal farming programs, working regularly with the U.S.D.A.'s Farm Services Agency in Yuba City, California, to preserve eligibility of Conservancy farming tracts in the relevant programs.
- Additional efforts in managing rental housing, repairing electrical, plumbing and HVAC
  in the rental housing, and locating signage and gates around these areas took additional staff
  effort.
- 7. Conservancy management has some responsibility to provide a public education component in its implementation of the NBHCP. The Conservancy's web site continues to be used by many. Conservancy staff also briefed a number of local, state and federal officials on the progress of the implementation effort. These included briefings for representatives of the U.S. Justice Department, Sacramento County Planning Department, various news reporters, Sacramento City Councilmembers and City management, Sutter County officials, Friends of the Swainson's Hawk, and a presentation at the semi-annual meeting of the Garden Highway Homeowners Association, among others.

A noteworthy example of management activity involving coordination included Conservancy staff's communications and meeting with the Central Valley Habitat Joint Venture. On August 22, 2003, Conservancy staff met in the Conservancy office with representatives of the Joint Venture, including those from the California Department of Fish and Game (Dave Smith), U.S. Fish and Wildlife Service (Bob Shaffer), State of California Wildlife Conservation Board (Peter Perrine), U.S. Geological Survey (Michael Miller) and Ducks Unlimited (Olen Zirkle). The session was helpful in coordinating resource allocations and sharing information helpful to NBHCP implementation.

#### II. NATOMAS BASIN HABITAT CONSERVATION PLAN SECTION IV.G.3

Accounting for each jurisdiction (City of Sacramento, Sacramento County, Sutter County and Metro Air Park):

- 1. Take: The annual incremental and cumulative area converted to urban development:
  - a. In the applicable permit area and entire NBHCP area.
  - b. In the Swainson's hawk zone (the area within 1 mile of the Sacramento River).
  - c. In vernal pools.

The Conservancy provides information from the City in this regard in Appendix A which follows and in Section I.1 and I.2 of this report.

- 2. Mitigation: The annual incremental and cumulative area of mitigation lands acquired:
  - a. In-Basin:
    - i. Lands managed as marsh.
    - ii. Lands managed as rice, including associated fallow land.
    - iii, Lands managed as upland reserves.
  - b. Out-of-Basin in Area "B."
  - c. Out-of-Basin in Area "C."
  - d. Status of the initial 400 acres (when purchased and what habitat type).
  - e. Mitigation for vernal pools, as appropriate.

Please refer to Section I (3) and Table 3 above for a response to "a." See also Section III (2) and Table 7.

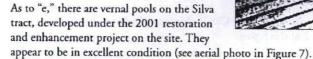
As to "b," no lands have been acquired in Area B.

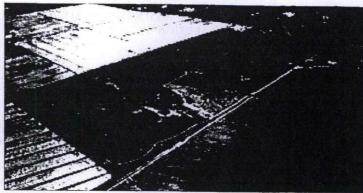
As to "c," no lands have been acquired in Area C.

As to "d," the initial 338 acres were acquired at the Betts, Kismat and Silva tracts. At present, the habitat type is a mix of upland reserve with a large percentage converted (or restored) to managed marsh. An aerial photo of the three tracts can be found in Figure 7.

The initial 400 contiguous acres were acquired in 1999 with the acquisition of the Lucich South and Bennett South properties. Combined, the tracts total 484.375 acres. Lucich South and Bennett South were both under restoration and enhancement construction during 2002, and through 2003, functioned as scheduled in the approved SSMP. The land use breakdowns on both parcels can be seen in Table 3. Giant garter snakes continue to be found on the boundaries of the constructed managed marsh complexes on the two tracts.

Figure 7. Aerial Photos of All Conservancy Lands Have Been Taken. The photo at right shows the status of the Betts, Kismat and Silva tract in early 2004 (photo is looking from the southwest towards the northeast). Irrigated pasture in the far right of the greened area can be seen, as can the vernal pool area at the center right portion of the photo. Potholes, used to concentrate prey for the GGS, can be clearly seen in the center left portion of the photo. Photo: American Aerial Surveys, Inc. for The Natomas Basin Conservancy. March 2004.





3. Financial status:

- a. The amount and source of funds collected.
- b. Funds expended or committed for acquisition.
- c. Funds held in reserve.
- d. Summary of expenditures for and revenues from reserve land management.
- e. An accounting of the long-term endowment account.

An entire accounting and response to this section can be found in Appendix J.

# III. NATOMAS BASIN HABITAT CONSERVATION PLAN SECTION IV.G.4

 The amount and location of all lands approved for urban development by public agencies (e.g., public works projects) for which mitigation fees were paid to the NBC in the preceding year.

Please see Section I.1 and Section I.2 of this report for detail on this matter.

A description of the locations and condition of any mitigation lands acquired in fee simple or conservation easement in the preceding year.

A record of all lands acquired by the Conservancy by size and date of acquisition can be found in Table 2, titled, The Natomas Basin Conservancy, Land Acquisition Tally. All lands are mapped and found in Appendix D. A quick reference guide to all Conservancy preserves can be found in Table 8, Reserve Characteristics Illustration. General descriptions for the properties acquired during the preceding year follow. Descriptions describe the property at the time of acquisition:

Atkinson tract (part of the North Basin reserve complex). APNs 35-320-012, 35-320-006, 35-330-022. This 205.397-acre parcel is bound by the North Drainage Canal on its east boundary and with some exception, Garden Highway on its west and Riego Road on its North. Its southern boundary mostly straddles the Sacramento and Sutter county boundary. The property is bordered on its east by sizable water conveyance structures. It has historically been used as a rice field, with the exceptions being its westernmost 40 acres, which are divided into approximately 20 acres of fallowed uplands, 11-acres of forest with some water drainage area, and approximately 10 acres of rice and wheat crop. Its southern boundary lies approximately 10.5 miles north of downtown Sacramento and 1.9 miles north of the runways at Sacramento International Airport. The property lies entirely within the Swainson's hawk zone along the Sacramento River. It derives water from a pump that lifts water from the North Drainage Canal. It also has a ground water well at its northwesterly corner along Garden Highway.

Huffman East tract (part of the North Basin reserve complex). APNs 35-240-009, 35-240-004, 35-240-001, 35-240-012. The Huffman East tract is a total of 135.746 acres, and lies at the northwest corner of the intersection of Riego Road and Power Line Road in south Sutter County. Its northern boundary is contiguous to the Conservancy's Bennett South tract, and its easterly border parallels Power Line Road. The entire south border abuts Riego Road and the westerly border is mostly contiguous to the Conservancy's Huffman West tract. The property lies entirely within the Swainson's hawk zone. It is approximately 11.5 miles north of downtown Sacramento and 2.8 miles north of the Sacramento International Airport. It lies entirely in the Natomas Central Mutual Water Company service territory. It has been planted to rice nearly every year in recent history. See special map in Figure 3.

Huffman West tract (part of the North Basin reserve complex). APNs 35-030-018, 35-030-019, 35-030-020, 35-030-021, 35-030-022. The Conservancy's 181.003-acre Huffman West tract is contiguous on its easterly border with the Conservancy's Huffman East tract and on its south border by the Conservancy's Atkinson tract. With the exception of an approximate 52.5-acre east field which has long been planted to rice, the property has mostly supported upland crops including alfalfa, tomatoes, and corn. It surrounds a real estate inholding of mostly farm buildings not owned by the Conservancy. Water is provided to the property by a groundwater well on the northwest corner of the property, as well as some appropriative rights to Sacramento River surface water. See special map in Figure 3.

Ruby Ranch tract (part of the North Basin reserve complex). APN 35-032-003. The 91.078 Ruby Ranch tract lies adjacent to the North Drainage Canal on its north and westerly boundaries. Immediately across the North Drainage Canal on the west lies the Conservancy's Atkinson tract. Ruby Ranch lies just under 10.5 north of downtown Sacramento and just inside Sutter county near its border with Sacramento County. It has been planted to rice nearly every year in recent history. It has a small natural gas well in the middle part of the north border. It is provided water service by the Natomas Central Mutual Water Company.

26

TABLE 8
THE NATOMAS BASIN CONSERVANCY
RESERVE CHARACTERISTICS ILLUSTRATION\*

		TIGA	TIO	N L	AND	TR	ACT	S IN	OR	DER		AC	QUI	RED	DA	TE				
-anota to a Scana	Silva	Betts	Kismat	Bennett North	Bennett South	Lucich North	Lucich South	Brennan	Frazer ,	Souza	Natomas Farms	Ayala	Sills	Alleghany 50	Cummings	Ruby Ranch	Atkinson	Huffman West	Huffman East	
CHARACTERISTIC COUNTY	700			TE VE				27020					THE STREET	T N	-VIII	-111				
Sacramento		•					CHE	STATE OF	er G	•	•	•	•	•	•	201 900				
Sutter	0	0		•	•	•	•	•	•	03	0.10	ditt	10	10	ahin	•	•	•	•	
PREDOMINANT LAND USE (2003)					ah.	d				JOH JOH	i fal	1129		110.2		alchi - 1			1151	
Rice				•	•		•					•	•		•	•	•	0	•	
Upland of the familiation		•	•	And to	•	0	State	•	0	•	•	alid 6	ri to	•	•		0	•	1.6	
Marsh	•	•	•	0	•	•	0	1 3 EL	•	124	•		16.34	244	0.223		0			
WATER	Tin A	35 20	itol	ng h	1	dis	Pirts	o ni	120	interior in the second	m .	nd	ve l	0.1		(3)(E)				
Natomas Water Co.	d) gr	rejor	0 80	•	•	•	•	tts i	•	•	•	•	•	•	•	•	0		•	
Ground Water	•	•				0		•	T.	78		135	12.3	9.00	0	1900	0	•		
Surface Water	•	•	•						TV									•	3	
MANAGEMENT PLAN	o local	nos	elsi	536	min	hoo	bin	Bys	202	azio	dioid	to	Juste	July	surte	1				
Covered by Approved SSMP		D	0	.0	0	0	0	0	0	0	0	0	0	0	0					
Not yet covered	ani.	10			76		T di	Sal		-07	20	1017	and	7730	723	•	•	•	•	
Marsh Construction '01	0	0	0	Le	Favo.	ative	00	iolq	100	1	1	Pini	P) Te	DIL	STICE	de m				
Marsh Construction '02	THE STATE OF		I ha	D.	0		0	0			BIGG.	100			CEVE.	18.46				
Marsh Construction '03	a Dea		ego	Velo	arl i	0		e res	D	0	D		la k	10	115	18.0				
Marsh Construction '04	y ythe	Lion	eq.f	g e	utin)	Ba	IJ,	a) bu	osla	di	ina)	18 1	2300			1737				
EXISTING TREES	1000	DAK	75.0		139		III.8	000	7	14		7/16			0 6					
0				•	•	•	•		•			•	•	W		•		1		
1 - 10 so belliqueb	2 0	mpa.				n.					•				BIN			•		
11 - 30	ing is	1921	1	×				•					70							
31+ drucky fred add is	•	•	12							191				•			•			
OTHER	To the	digre	100		100		1													
Fenced		•			0			0		•	•									
Livestock Grazing	•		•	SI-				•												
Residential Structures		•		1						•										
Farm Structure(s)		•	100	erik San					07											
Vernal Pools	d					1							N. S. S.							

<sup>\*</sup> Solid dot (•) represents inclusion of characteristic on that tract; hollowed-out dot (O) represents minor or partial inclusion on the referenced tract; a check mark (&) represents completion of project.

An accounting of the taking of any individual giant garter snakes, Swainson's hawks, or other covered species, if known, as a result of activities in the City's or Counties' permit areas in the preceding year, including any specimens taken for scientific purposes.

See Section I.9 (above) for a thorough discussion on this point.

 Plans for the acquisition of reserve lands in fee simple or conservation easement in the forthcoming year.

The Conservancy will continue to focus on reserve consolidation in its acquisitions. Other attractive properties with substantial biological values may surface and offer excellent opportunities. However, the priority of the Conservancy remains in the area of reserve consolidation in the North Basin Reserve Area, Central Basin Reserve Area and Fisherman's Lake Reserve Area (see Appendix D). The aim of the Conservancy's mitigation land acquisition program is to continue to attempt to assemble land necessary to meet the 2,500-acre contiguous land requirement, along with smaller parcels in minimum 400-acre blocks.

An outline of habitat management, enhancement, and monitoring activities conducted in the preceding year and planned activities and goals for the forthcoming year.

Please see I.6 above for a full discussion of this subject. Monitoring activities will be major in 2004, as the first year of the biological effectiveness monitoring program (BEMP) has begun pursuant to the 2003 NBHCP.

Pertinent results of biological surveys and monitoring activities conducted in the preceding year.

Please refer to Appendices F, G and X for a complete reporting on this issue. Additionally, the Conservancy's monitoring efforts resulted in the trapping of the first giant garter snake actually in a constructed managed marsh complex on Conservancy land, in this case, on the Conservancy's Silva tract. Prior trappings on the Silva tract were made near the water outfall structure "R" in a drainage ditch that bordered the Conservancy's property. The August 13, 2003 discovery by U.S. Geological Survey scientists was actually inside the developed area. A press release which details the discovery appears in Appendix Z.Conservancy staff periodically observes covered species on Conservancy land in its periodic site inspection tours. Such observations are recorded and are presented on Appendix AA.

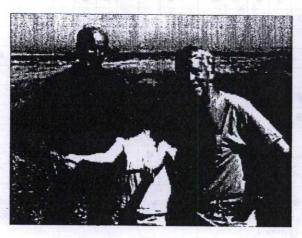


Figure 8. GGS Identified on Conservancy Preserve. Lisa Martin, a scientist with the U.S. Geological Survey, prepares the first giant garter snake (an immature male) identified on the Conservancy's BKS preserve, for measuring, weighing, health examination and tagging while Conservancy President David Christophel (left), and USGS principal investigator Glenn Wylie, PhD (right) look on.

Pertinent information from RD1000 and NCMWC as described in Section C.1.e above (Reporting/Revisions).

. Reports from RD 1000 and Natomas Mutual Water Company follow in Appendix O.

 Any other pertinent information regarding implementation by the permittees of the terms of the NBHCP and its associated permits or circumstances within the reserve system specifically or the plan area generally.

The Conservancy will be heavily involved in 2004 in implementing the first full year of the new 2003 NBHCP. This will require additional effort, especially with respect to monitoring, but also, numerous other activities. See Appendix V for more information on tasks and projects related to this monitoring implementation effort.

As further indications of Conservancy activities during the reporting year, copies of extracts of the adopted minutes of all Conservancy Board of Directors meetings can be found in Appendix P.

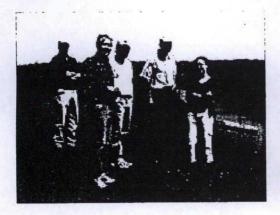


Figure 9a. Conservancy's On-Going Consultations. The Conservancy's on-going effort to consult with experts included a spring visit with giant garter snake biologists, and visits to a number of preserve sites, including the one featured above on the Lucich South tract. From left: Board member Mike Bradbury, USGS biologist Glenn Wiley, PhD, USGS biologist Mike Cassazza, Conservancy Board President Dave Christophel, USGS biologist Lisa Martin. Photo: The Natomas Basin Conservancy.



Figure 9b. Other coordination and communication meetings were held with local government officials. The photo above shows a 2003 on-site tour with Sacramento County Planning Department officials on the Conservancy's Silva tract. Photo: The Natomas Basin Conservancy.

#### IV. ANNUAL WORK PLAN SECTION IV.D.1

The work plan for the Conservancy's year 2003 effort can be found i "Management activities for the coming year."

#### TABLE OF APPENDICES

Report from the City of Sacramento Appendix A: Appendix B: Maps of Urban Development 2003 Natomas Basin Habitat Conservation Plan Tasks Checklist Appendix C: Maps of Mitigation Land Acquired To Date Appendix D: Geophysical Reports and Studies on Conservancy Land, 2003 Appendix E: Appendix F: Giant Garter Snake Monitoring Report, 2003 Appendix G: Swainson's Hawk Monitoring Report, 2003 Phase One Environmental Reports for Mitigation Land Acquisitions in 2003 Appendix H: Tree Count, 2003 Appendix I: Appendix J: Financial Statement Appendix K: Site-Specific Land Management Plan Appendix L: Scientific Literature Search, Swainson's Hawk Foraging Habitat and Prey Meeting notes, UC Cooperative Extension, Upland Vegetation Appendix M: Economic Planning Systems' Finance Model Update Appendix N: Reports from Reclamation District 1000 and Natomas Mutual Water Appendix O: Company Minutes Recap of the Board of Directors Meetings, The Natomas Basin Appendix P: Conservancy Vegetation Management and Livestock Grazing: Betts, Kismat and Silva Site, Appendix Q: The Natomas Basin Conservancy. 2003 Progress Report. GGS Monitoring Sighting Report, Lucich North/Frazer Habitat Appendix R: Creation Project **Endowment Fund Accounting** Appendix S: GGS Monitoring Protocol Discussion Paper Appendix T: Biological Effectiveness Monitoring Program, Request for Proposals Appendix U: Biological Effectiveness Monitoring Work Plan, 2004, 2005 & 2006 Appendix V: Appendix W: Permits Issued by California Department of Fish and Game and U.S. Fish and Wildlife Service Results of Surveys for Giant Garter Snakes at the Natomas Basin Conservan-Appendix X: cy's Atkinson Parcel Report of Estimated Canal Flow to Natomas Basin Conservancy, Appendix Y: Nolte Engineering Giant Garter Snake Discovered on Conservancy Preserve, press release Appendix Z:

Covered Species Sitings on Conservancy Preserves, Conservancy Staff Log

31

Appendix AA:

#### GLOSSARY AND ABBREVIATIONS

Annual Report

The Implementation Annual Report. The Conservancy is required under Section 5.2 of the Implementation Agreement and Section IV.G.4 of the 1997 Natomas Basin Habitat Conservation Plan to produce and deliver an implementation annual report no later than 60 days after the close of the calendar year. Items to be included in the report are specifically prescribed. Similar requirements come with the 2003 NBHCP except that the report is due 120 days after the close of the calendar year.

CDFG

California Department of Fish and Game.

Conservancy

The Natomas Basin Conservancy. A California non-profit public benefit corporation serving as "plan operator" of the Natomas Basin Habitat Conservation Plan.

Giant garter snake

(Thamnophis gigas) The giant garter snake is one of the largest garter snakes of the genus Thamnophis, with a total length up to 4.5 feet or greater. The garter snake in the Sacramento Valley and Delta regions has a dorsal ground color often dark brown to olive or nearly black, a complete dorsal strip varying in color from dull yellow to bright orange, and often orange on the ventral surfaces as well. Officially listed as a "threatened" species under federal and state authority, it is one of the two primary species protected under the NBHCP.

IA

The Natomas Basin Habitat Conservation Plan Implementation Agreement. (See NBHCP.)

MAPPOA

Metro Air Park Property Owners Association, permittee of the Metro Air Park Habitat Conservation Plan.

**NBHCP** 

The 1997 Natomas Basin Habitat Conservation Plan and the 2003 Natomas Basin Habitat Conservation Plan. The NBHCP applies to the 53,341-acre interior of the Natomas Basin, located in the northern portion of Sacramento County and the southern portion of Sutter County. The Basin contains incorporated and unincorporated areas within the jurisdiction of the City of Sacramento, Sacramento County and Sutter County. The purpose of the NBHCP is to promote biological conservation along with economic development and the continuation of agriculture within the Natomas Basin. The NBHCP establishes a multi-species conservation program to mitigate the expected loss of habitat values and incidental take of protected species that would result from urban development, operation of irrigation and drainage systems, and rice farming. The goal of the NBHCP is to preserve, restore, and enhance habitat values found in the Natomas Basin while allowing urban development to proceed according to local land use plans. The NBHCP is a supporting document for federal Section 10(a)(1)(B) and State Section 2081 permit applications. Section 10(a)(1)(B) of the federal Endangered Species Act allows incidental take of endangered or threatened species subject to its permit requirements. Similarly, State Section 2081 of the California Fish and Game Code allows the California Department of Fish and Game to enter into management agreements that allows activities which may otherwise result in habitat loss or take of individuals of a state listed species.



Burrowing owl (Athene cunicularia)

One of the NBHCP's "covered species" and seen on the Conservancy's Silva tract during 2003. Photo: George Samuel Oki Managed marsh

Seasonal or perennial wetland managed for habitat values for the giant garter snake, a federally protected species, and other covered species. Such land must meet minimum requirements as described in the NBHCP which include, but are not limited to, an assured water supply that will serve the marsh from April through September of each year. The marsh will be a combination of open water, land with wetland vegetation, and other upland areas and may include a buffer area at the periphery. The Conservancy must develop detailed management plans pursuant to Chapter IV, Sections C.1 and D of the 1997 NBHCP for those Conservancy lands designated as managed marsh, in coordination with and subject to the approval of the CDFG and USFWS. Similar reporting is required for the 2003 NBHCP.

Permit
Or, incidental take permit. A permit issued by the USFWS under Section 10 (a)(1)(B) of the federal Endangered Species Act which authorizes the incidental take of a covered species which may occur as a result of urban development, rice farming and management activities with the permit area. Permit may also be used to collectively refer to Section 10 (a)(1)(B) permit, and the Section 2081, management authorization, of the State of

California. See also "Take" below.

RD 1000 Reclamation District 1000.

Swainson's hawk

(Buteo swainson') The state-listed threatened Swainson's hawk is a medium sized buteo (25 to 35 ounces) and is distinguished from other buteos by long, narrow, pointed wings. Swainson's hawk plumage varies greatly.

Light phase birds have buff white wing linings with darkly barred brown flight feathers; dark phase birds are dark brown with white undertail co-

verts, and intermediate reddish plumage occurs between phases. It is one of the two primary species covered in the NBHCP.

other actions. The Act should be consulted for further information.

Take "Taking" of Covered Species. The Endangered Species Act of 1973, as Amended, defines take as follows: "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Additional language from the Act prohibits present or threatened destruction, modification, or curtailment of...habitat and

Technical Advisory Committee. The TAC consists of six members, two each appointed from the City of Sacramento, the California Department

of Fish and Game and the U.S. Fish and Wildlife Service.

USGS/BRD United States Geological Service, Biological Resource Division. The Con-

servancy works with the Dixon, California office of USGS/BRD on giant

garter snake matters.

USFWS United States Fish and Wildlife Service.

Water Company The Natomas Central Mutual Water Company is the purveyor of water

to most of the Conservancy's mitigation land. The Conservancy owned 2,567 shares of stock in the Water Company at December 31, 2003.

TAC

genni A

mm/s

ALGERGIA

William Total

SALT

163

THE STANCE YOUR

WARI

THE PERSON

The last relegation of the control o

The state of the s

The country of the co

heregon to the first of the former, the production of the first of the

The second second part of the second second

n de ee 28 heightij geverk van kan ingere gewijk De eelste Block van de ee stree een

ANY STATE OF STATE OF

the program to seed the public of the relation of the relation



The Natomas Basin Conservancy 1750 Creekside Oaks Dr., Suite 290 Sacramento, CA 95833

Phone: 916.649.3331 FAX: 916.649.3322

# IMPLEMENTATION ANNUAL REPORT

EXECUTIVE SUMMARY

CALENDAR YEAR 2004

APRIL 30, 2005

- 2 INTRODUCTION
- 3 LAND ACQUISITION
- 4 MITIGATION LAND BALANCES
- 6 PROGRAMMATIC
- 7 BUDGET AND FINANCE
- 8 CONCLUSION
- 9 FUTURE PLANS

OTHE NATOMAS BASIN CONSERVANCY 2005

## INTRODUCTION

This report responds to a requirement of the 2003 Natomas Basin Habitat Conservation Plan (NBHCP) and the Implementation Agreement (IA) which calls for an implementation annual report. The 2003 NBHCP is supported by permits issued to the Conservancy by the California Department of Fish and Game (issued July 10, 2003; permit number 2081-20032-019-02) and the U.S. Fish and Wildlife Service (issued June 27, 2003; permit number TE073667-0)

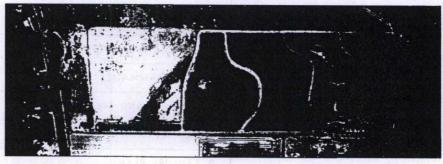


Giant garter snake (Thamnophis gigas)

The 2004 Implementation Annual Report comes in three parts. First, this Executive Summary. Second, the "Task Reference and Description" matrix. Third, the Appendices. The "Task Reference and Description" matrix (part 2 of 3) is the heart of the 2004 Report. The Appendices (part 3 of 3) are an integral part of the 2004 Implementation Annual Report.

This is the sixth full-year annual report prepared by the Conservancy. The organization has grown in many ways. Its land holdings have been accumulated at a rate far faster than predicted when the first NBHCP was adopted. Notwithstanding this rapid growth, the NBHCP has functioned well, and the Conservancy's "Plan operator" functions have been carried out according to plan. For example, the Conservancy has completed restoration and enhancement construction projects on nine of its preserves. It is over halfway to assembling the 2,500-acre contiguous preserve. It has over \$6 million in endowment funds. And this year for the first time, it has assembled a comprehensive, integrated biological effectiveness monitoring report. Despite all this, the Conservancy's overhead has remained modest. It went from a staff count of two to three in 2004, as accounting and bookkeeping functions needed to be taken over after five years of generous support from the City of Sacramento.

The Conservancy is pleased to present this report and to share the many positive steps it has taken towards successful implementation of the Natomas Basin Habitat Conservation Plan.



Cummings tract 2005 restoration and enhancement construction project

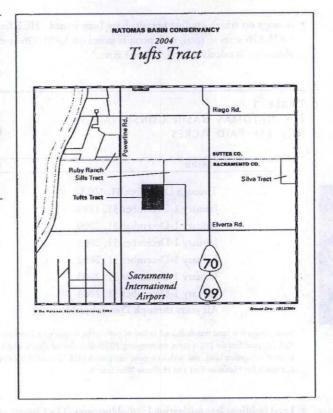
In addition, the 2003 NBHCP has considerably more tasks in it than did the 1997 NBHCP, and due to its size and complexity, these tasks need to be reported in a manner that facilitates compliance review by the State and federal Wildlife Agencies.

<sup>1</sup> The 2004 Implementation Annual Report is presented in a different format than previous Reports. The reason for this is that the 2003 Natomas Basin Habitat Conservation Plan (NBHCP) was adopted at mid-2003, and last year's report was a hybrid of the format prescribed in the 1997 NBHCP and the 2003 NBHCP. Now, there has been a full year of operations under the 2003 NBHCP. Therefore, this year's presentation format is one that attempts to adhere completely to the 2003 NBHCP.

## LAND ACQUISITION

 Additional acreage acquired in 2004. The Conservancy acquired an additional farm (the "Tufts" tract) totaling 147.95 acres in 2004. This brings the total number of farms acquired to date to 20.

Figure 1. Acquisition of Tufts Tract Advances Consolidation of Reserves. Acquisition of the Tufts tract in 2004 helped further efforts to consolidate Conservancy land into larger, contiguous preserves. The map at right displays the acquisition and how it relates to existing land holdings in the Conservancy's Central Basin Reserve Area. Conservancy plans for 2005 include further efforts at preserve consolidation.



Total land acquired through 2004. The Conservancy has acquired a total of 3,363.8251 acres under the HCP, 3,369.5830 acres when conservation easements are included, and 3,569.6830 when supplemental mitigation dedications are included. There have been 1,616 acres acquired in Sacramento County and 1,953 acres in Sutter County.

## MITIGATION LAND BALANCES

- Acreage upon which fees have been paid. City of Sacramento fees have been paid on a
  total of 5,702.3 acres and grading permits have been issued on a total of 5,627.8 acres.
  Through Metro Air Park's participation, there have been HCP fees paid on 233.526 acres
  of development.
- Acreage on which grading permits have been issued. HCP fees have been paid on 5,935.826 acres in total, with permits issued on 5,861.326 acres in total.<sup>2</sup> The mitigation obligation is calculated at 2,930.663 acres.<sup>3</sup>

TABLE 1
THE NATOMAS BASIN CONSERVANCY
HCP FEE-PAID ACRES

PERIOD	HCP FEE PAID ACRES*
Through December 31, 1998	1,515.66
January 1-December 31, 1999	1,465.47
January 1-December 31, 2000	598.07
January 1-December 31, 2001	242.09
January 1-December 31, 2002	777.81
January 1-December 31, 2003	1,241.98
January 1-December 31, 2004	178.07
All years through December 31, 2004	5,702.3

- \* Some mitigation land was dedicated in lieu of paying the Acquisition Fund portion of the NBHCP fee. Metro Air Park has paid fees on 190.4 acres, representing 100% of its Initial Phase, Tier 1 development. It has added 200 acres of mitigation land, and with its regular mitigation (116.763 acres), accounts for 316.763 mitigation acres (see totals for Huffman East and Huffman West tracts).
- Land holdings less mitigation land obligations. The Conservancy's present holdings of 3,569.6830 total acres, less 2,930.663 acres of mitigation required, leaves 639.02 acres.
- Surplus land commitments. Of the 639.02 acres not being used for HCP mitigation, 200 acres are held in perpetuity as supplemental dedicated mitigation for Metro Air Park, leaving a Conservancy land holding balance of 439.02 surplus acres.
- Adjustments for anticipated future mitigation. Fees have been paid to the City on an additional 74.5 acres for which no grading permits have yet been issued, leaving the Conservancy with an anticipated mitigation need of 37.25 acres for this fee paid, but as-yet permitted 74.5 acres. (439.02 acres less this 37.25-acre anticipated obligation equals a balance of 401.77 acres.)



Swainson's hawk (Buteo swainsoni)

<sup>2</sup> This assumes that Metro Air Park has received grading permits on all of its fee-paid acreage.

<sup>3</sup> Using the "one-half to one" (0.5:1) mitigation ratio in the 2003 NBHCP.

TABLE 2
THE NATOMAS BASIN CONSERVANCY
LAND ACQUISITION TALLY THROUGH 12.31.04



Cummings Tract Habitat construction



Cummings Tract Habitat construction with steep-sided banks for giant garter snakes

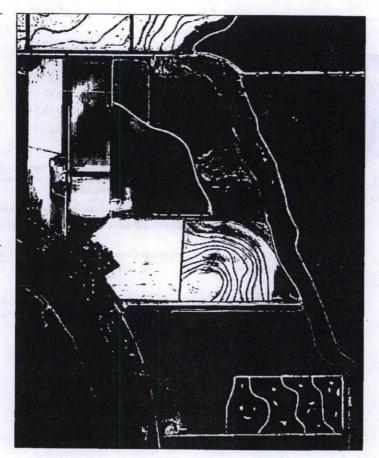
PROPERTY	DATE ACQUIRED	ACRES					
he Minnerstene Plan. The	Booken P. ex Ni e-Spedi	150 200					
Silva	1.7.99	159.200					
Betts	4.5.99	138.992					
Kismat	4.16.99	40.293					
Bennett (C.L.)	5.17.99	226.675					
Bennett (H&B)	5.17.99	132.486					
Lucich North*	5.18.99	267.986					
Lucich South	5.18.99	351.889					
Brennan	6.15.00	241.376					
Frazer	7.31.00	92.600					
Souza**	7.2.01	44.680					
Natomas Farms	7.9.01	96.460					
Ayala	2.20.02	317.3674					
Sills	7.15.02	575.5559					
Alleghany 50	11.7.02	50.2601					
Cummings	11.7.02	66.8307					
Atkinson	6.12.03	205.397					
Ruby Ranch	6.23.03	91.078					
Huffman West***	9.30.03	181.003					
Huffman East	9.30.03	135.746					
Tufts****	9.29.04	147.95					
Total		3,563.8251					

- Earlier-stated possible reduction of Lucich North of 20.68 acres owing to a claim by the Sacramento Area Flood Control Agency (SAFCA) has been resolved and 20.68 acres is now fully countable. A flood control easement exists on 2.5 acres of the Lucich North tract in favor of SAFCA.
- \*\* Agreement of Purchase and Sale requires 3.68 acres can be purchased back from the Conservancy on this parcel.
- \*\*\* The Huffman West tract and 19 acres of the Huffman East tract is for supplemental mitigation required of Metro Air Park
- \*\*\*\* 63.116 acres for Opus West mitigation (Promenade) with balance, 84.834, available for Metro Air Park mitigation for a two-year period.
- Annual 200-acre May 1 cushion has been met. The Conservancy has more than enough
  acreage to meet the 200-acre "cushion" required in the HCP on May 1 of each year.

## PROGRAMMATIC

- Property documentation. Phase One environmental reports, American Land Title Association (ALTA) land surveys and aerial photographs were completed on each of the Conservancy's land acquisitions.
- New Site-Specific Management Plan. The Conservancy prepared and received approval on a comprehensive revised Site-specific Management Plan in 2004.
- Biological Effectiveness Monitoring. The first comprehensive biological monitoring effort was completed under the Biological Effectiveness Monitoring Program, newly required in the 2003 NBHCP.
- Required documents submitted. The Conservancy issued a timely implementation annual report, budget, financial audit and all other required reporting documents during the year.
- Restoration and enhancement efforts. A restoration and enhancement construction
  project was embarked upon in 2004 on the Conservancy's Cummings tract. Touch ups
  and finalizations were also worked on to complete the 2003 restoration and enhancement
  construction effort, which was the largest such effort so far for the Conservancy.

Figure 2. Restoration and Enhancement in the Fisherman's Lake Reserve Area. The 2004 restoration and enhancement construction project on the Conservancy's Cummings tract is evident in this aerial photo (see at bottom of photo at right). The work complements the prior year's work on the Natomas Farms tract (upper right of photo). Together, they connect with Fisherman's Lake (linear, from North to South at right). The Sacramento River is seen in the lower left of the aerial photo.



# BUDGET AND FINANCE

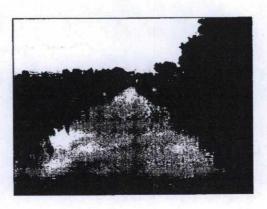
Finance Model update. The HCP finance model was updated and a fee increase was requested, granted and implemented.<sup>4</sup>

TABLE 3
THE NATOMAS BASIN CONSERVANCY
HCP FEE HISTORY

YEAR	ESTABLISHED FEE
1997	\$2,240
1998	\$2,656
1999	\$3,292
2000	\$3,942
2001	\$5,993 + \$4,028 premium = \$10,021*
2002	\$7,934 + \$4,028 premium = \$11,962*
2003	\$12,2705
2004	\$16,1246

- \* HCP "premium" was established as a result of an agreement to settle litigation, FWS v. Babbitt.
- Endowment Fund. The Conservancy's endowment fund account continues to grow, and remains conservatively invested in order to insure its long-term viability. The account balance was \$5,803,065 in the Endowment Fund and \$919,480 in the Supplemental Endowment Fund at December 31, 2004.

Figure 3. Natomas Farms. A new water conveyance structure delivers water to the Conservancy's Natomas Farms marsh complex.



<sup>4</sup> City of Sacramento City Council resolution #2004-285 ("A Resolution increasing the amount of the habitat conservation fee established pursuant to Chapter 18.40 of Title 18 of the City Code and requiring developers in Natomas to dedicate land for habitat mitigation in lieu of payment of HCP fees in specific circumstances, to take effect immediately"), approved April 20, 2004.

<sup>5</sup> Also established is a fee of \$7,770 per acre for fee obligations satisfied in part with land dedication.

<sup>6</sup> Also established is a fee of \$8,624 per acre for fee obligations satisfied in part with land dedication.

## CONCLUSION

The Conservancy's 2004 was its busiest year yet. The key accomplishments were:

- 1. the development of a comprehensive biological effectiveness monitoring report,
- 2. revision of the site-specific management plan,
- 3. restoration and enhancement construction project on the Cummings tract,
- 4. assumption of financial and accounting functions,
- calibration and refinement of newly-constructed managed marsh to optimize them for their intended function, and
- 6. refinement of the NBHCP Finance Model (along with NBHCP fee adjustments).

For the first time, the Conservancy had the benefit of a comprehensive biological monitoring function through its contractor Jones & Stokes, and with the restoration ecology and land management team, through contractor Wildlands, Inc. Combined with Conservancy staff, the three teams coordinated efforts that have resulted in an improved NBHCP implementation. The extensive specialties and resources of all three groups (Jones & Stokes, Wildlands, Inc. and the Conservancy) is occasionally supplemented by other specialists (e.g., grassland experts at Hedgerow Farms, giant garter snake experts at USGS's Dixon, California field station, groundwater experts at Odell's Well Service and many others) to address most any question or need the Conservancy might have. Calling on the additional resources that make up the NBHCP Technical Advisory Committee (TAC) round out the extensive resources available to the Conservancy.

## FUTURE PLANS

The year 2005 will be another year of growth for the Conservancy. Management activity will be focused primarily in the following areas:

- refine and effectively manage new and start-up managed marsh projects resulting from the heavy restoration and enhancement construction schedule over the last two years,
- 2. implementation of the revised and more extensive 2003 NBHCP,
- developing the 2003 NBHCP-required biological effectiveness monitoring plan, due in June 2005,
- 4. absorb an expected large amount of new mitigation land into the Conservancy's land inventory,
- 5. ramping up internal finance, accounting and bookkeeping functions to replace those functions previously provided by the City of Sacramento,
- 6. continue to patch together additional lands to further the string of successes in reserve consolidation, and
- 7. extensive oversight of financial planning to ensure that the HCP fee is adequate to fully fund implementation efforts.

Further information can be obtained by calling on the Conservancy's web site (www.natomasbasin.com) or contacting the Conservancy directly.

Figure 4. Restoration and Enhancement Construction. Earth work underway in the 2004 marsh construction project on the Conservancy's Cummings tract.



TABLE 4
THE NATOMAS BASIN CONSERVANCY
GENERAL RESERVE CHARACTERISTICS ILLUSTRATION\*

Mitigation land tracts in order of acquired date	Silva	Betts	Kismat	Bennett No.	Bennett So.	Lucich No.	Lucich So.	Brennan	Frazer	Souza	Natomas Farms	Ayala	Sills	Alleghany 50	Cummings	Ruby Ranch	Atkinson	Huffman West	Huffman East	Tufts
COUNTY																		Ĭ.		
Sacramento	•									•	•	•				.00			-	
Sutter	0	0		•	•	•	•		•		1					•			•	-
PREDOMINANT LAND USE (2004)	1 (2)	grid	araid Estar	LEG Y	1630	kin edi	ed L		Len		112	i giri								
Rice	adi.	1	100	•	•	10 11	•	•			(03 A)E	•	•			•			•	•
Upland	•	•	•		•	0			0	•	•		P. P. A.	•	•		0	•	θ	
Marsh	•	•	•	0	•	•	0		•		•						Θ			
WATER			Mb.	Lean	91,31	Mahie				alen	IO RE	livili								
Natomas Water Co.				•	•	•	•		•	•	•	•	•	•	•	•	0		•	•
Ground Water	•	•				•		•	•		L. Ye						0	•		
Surface Water	•	•	•	•	•	•	•		•	•		•	•		•		0	•	•	•
MANAGEMENT PLAN Covered by Approved	V	~	~	~	V	V	V	V	V	~	V	V	V	V	~	V	~	V	~	
SSMP	-							-	•	•	-	-	-	-	-	-	V	-	V	
Not yet covered	-								100			1						-11-		•
Marsh Construction '01	V	V	V																	
Marsh Construction '02				V	V		V	0												
Marsh Construction '03		- 138				V		in.	V	V	V			3						
Marsh Construction '04				_											V					
EXISTING TREES																				
0		18		•	•	•	•		•		1.46	•	•			•			•	•
1 – 10			•		1	BU	535		Rich				Tion I			15		•		
11 – 30		18						•	1	•							E			
31+	•	•											-	•	•		•			
OTHER																				
Fenced	•	•	•		0		4	0		•	•				•	SIE				
Livestock Grazing	•	•	•					•		θ	•	-1156								
Residential Structure	•	•								•										
Farm Structure(s)	•	•								•								4		
Vernal pools	V	150				- 2														

<sup>\*</sup>Solid dot (①) represents inclusion of characteristic on that tract; hollow-strikethrough dot (①) represents minor, partial or planned inclusion on the referenced tract; a check mark (🗸) represents completion of project.



The Natomas Basin Conservancy 1750 Creekside Oaks Dr., Suite 290 Sacramento, CA 95833

Phone: 916.649.3331 FAX: 916.649.3322

water and chart of the same of



The Natomas Basin Conservancy 2150 River Plaza Drive, Suite 460 Sacramento, CA 95833

Phone: 916.649.3331 FAX: 916.649.3322

## IMPLEMENTATION ANNUAL REPORT EXECUTIVE SUMMARY

CALENDAR YEAR 2005

APRIL 30, 2006

- 2 INTRODUCTION
- 3 LAND ACQUISITION
- 5 MITIGATION LAND BALANCES
- 9 PROGRAMMATIC
- 10 BUDGET AND FINANCE
- 11 CONCLUSION
- 12 FUTURE PLANS

OTHE NATOMAS BASIN CONSERVANCY 2006

## INTRODUCTION

This report responds to a requirement of the 2003 Natomas Basin Habitat Conservation Plan (NBHCP) and the Implementation Agreement (IA) which calls for an implementation annual report. The 2003 NBHCP is supported by permits issued to the Conservancy by the California Department of Fish and Game (issued July 10, 2003; permit number 2081-20032-019-02) and the U.S. Fish and Wildlife Service (issued June 27, 2003; permit number TE073667-0).



Giant garter snake (Thamnophis gigas)

The 2005 Implementation Annual Report comes in three parts. First, this Executive Summary. The reader will get a reasonably comprehensive account of the 2005 reporting from this portion of the Implementation Annual Report, but the "Task Reference and Description" matrix ("2 of 3") provides detail on every task requirement in the 2003 NBHCP. Third, the Appendices. The Appendices ("3 of 3") are an integral part of the 2005 Implementation Annual Report.

This is the seventh full-year annual report prepared by the Conservancy, the first being 1999. The organization's land holdings have been accumulated at a rate far faster than predicted when the first NBHCP was adopted. Notwithstanding this rapid growth, the NBHCP has functioned well, and the Conservancy's "plan operator" functions have been carried out according to plan. For example, the Conservancy has completed restoration and enhancement construction projects on nine of its preserves. It is approximately two thirds of the way to assembling the 2,500-acre contiguous preserve. At December 31, 2005, it had \$9,496,216.02 in endowment funds. Importantly, the Conservancy conducted its second annual comprehensive, integrated biological effectiveness monitoring report.

Even with this activity, the Conservancy has kept overhead to a minimum, and continues to implement the NBHCP with a staff of three.

The Conservancy is pleased to present this report and to share the many positive steps it has taken towards successful implementation of the Natomas Basin Habitat Conservation Plan.

A total of 1,640.9829 acres are contiguous in the Conservancy's North Basin Reserve Area; an additional 360.586 is nearly adjacent.

# LAND ACQUISITION

Additional acreage acquired in 2005. The Conservancy acquired additional farms in 2005. The following acquisition activity took place:

TABLE 1
2005 LAND ACQUISITION DETAIL

TRACT ACQUIRED	DATE OF	ACRES	MANNER OF					
	ACQUISITION	Shirtoniani	ACQUISITION					
Rosa East	3.24.05	106.2827	Property exchange					
Rosa Central	3.24.05	100.015	Property exchange					
Bolen North	4.29.05	113.619	Dedication - Forecast Home					
Bolen South	4.29.05	102.381	Dedication – Forecast Homes					
Vestal South	9.12.05	94.951	Dedication – Beazer Homes and Sacramento County Lower Northwest Interceptor					
Total 2005 acquire	ed acres	517.2487						

In terms of land acquisition activity, 2005 was a busy year. A total of five acquisitions were made totaling 517.2487 acres. In addition, the Conservancy's first exchange of land was negotiated and completed. In the exchange, the Conservancy gave up 139.15 acres of the south end of its Sills tract, which is adjacent to the northwest corner of the intersection of U.S. Highway 99 and Elverta Road. From this acreage relinquished, it reserved for itself a 12.58-acre north-south corridor along the west boundary of the property in the form of a conservation easement, and a 5.197 easement along the east border of the property in the form of an access easement.

In addition, the exchange resulted in the acquisition of the Rosa Central and Rosa East tracts, which total 206.2977 acres (see Figure 2). The acquisition of this acreage helps with preserve consolidation in the Conservancy's Fisherman's Lake Reserve Area. Nearly all of the acquired property lies in the NBHCP's Swainson's hawk zone. Since the 2003 NBHCP strongly encourages consolidation of preserves, and places a priority on acquiring land in the Swainson's hawk zone, this exchange improved the biological values of the Conservancy's land holdings. It also substantially expanded its land holdings. There was a net 67.1477 acres gained in the exchange, not including the combined total of 17.777 acres of easement acreage.

A graphic representation of the combined total of the Conservancy's land holdings at December 31, 2005 can be found in Exhibit 1, attached to this report (see "2005 Base Map"). This map is frequently updated and can always be found on the Conservancy's web site (www.natomasbasin.org).

<sup>&</sup>lt;sup>2</sup> Sacramento County's Lower Northwest Interceptor mitigation was subsequently transferred to the Conservancy's Bennett North tract.

- Preserve consolidation. In addition to the preserve consolidation benefits of the Sills-Rosa exchange, the Conservancy reinforced preserve connectivity and consolidation with the acquisition of the Vestal South tract (see Figure 1). Before, the southerly portion of the Conservancy's North Basin Reserve Area was thinly connected with a 40-foot wide corridor on the Conservancy's Atkinson tract. Now that connection is substantially more solid with the connecting up of the Ruby Ranch tract on the south and the Huffman East tract on the north through the acquisition of the Vestal South tract.
- Total land acquired through 2005. The Conservancy has acquired a total of 3,965.5589 acres in total as of December 31, 2005. Easements represent 23.5349 acres of this total.
   There have been 1,701.4126 acres acquired in Sacramento County and 2,264.0461 acres in Sutter County.<sup>3</sup>

Vestal Tract Location Map

Vestal Tract Location Map

Huffman West

Huffman West

Huffman I

Robert Advances

Reserves.

e Vestal

Ob helped

o consolidate

d into larger,

reves. The

olays the
low it relates

notings in

s North Basin

nservancy

clude

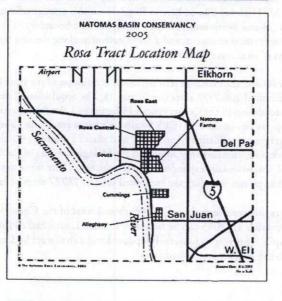
preserve

In the basin anservancy

clude

preserve

Figure 1. Acquisition of **Vestal South Tract Advances** Consolidation of Reserves. Acquisition of the Vestal South tract in 2005 helped further efforts to consolidate Conservancy land into larger, contiguous preserves. The map at right displays the acquisition and how it relates to existing land holdings in the Conservancy's North Basin Reserve Area. Conservancy plans for 2006 include further efforts at preserve consolidation.



NATOMAS BASIN CONSERVANCY

Figure 2. Acquisition of Rosa Central and Rosa East Tracts Advance Consolidation of Reserves. Acquisition of the two Rosa tracts in 2005 helped further efforts to consolidate Conservancy land in the Fisherman's Lake Reserve Area. The map at right displays the acquisitions and brings to 464.5285 acres the land acquired in the Conservancy's Fisherman's Lake Reserve Area.

<sup>3</sup> A very small remainder is supplemental mitigation

## MITIGATION LAND BALANCES

- Acreage upon which fees have been paid. Fees related to development in the City of
  Sacramento permit area have been paid on a total of 6,867.22 acres, including 678.39
  acres added in 2005. Through Metro Air Park's participation, there have been HCP fees
  paid on an additional 316.76 acres. Combined, there have been fees paid on 7,183.98 acres
  of development.
- Fees paid. The amount of HCP fees paid by development in the City of Sacramento Permit Area total \$56,337,637.47 from inception to date, and \$14,495,414.31 during 2005. For Metro Air Park, total fees paid equal \$5,560,407.57 to date and zero in 2005. Combined, the total amount of fees paid from inception to date total \$61,898,045.04. (All figures include the land value of in-lieu land dedication).
- Acreage on which an urban development permit have been issued. The City of Sacramento reports it has authorized grading on 6,286.5 acres since inception, and Metro Air Park has developed 109.07 acres of its development.
- Land holdings less mitigation land obligations. The Conservancy's present holdings total 3,965.4587 acres. However, see below for an accounting of these.

TABLE 2
THE NATOMAS BASIN CONSERVANCY
HCP FEE-PAID ACRES\*

PERIOD	***************************************	HCP FEE-PAID ACRES*
Through Decemb	er 31, 1998	1,515.66
January 1-Decemb	per 31, 1999	1,465.47
January 1-Decemb	per 31, 2000	598.07
January 1-Decemb	per 31, 2001	242.09
January 1-Decemb	per 31, 2002	777.81
January 1-Decemb	per 31, 2003	1,241.98
January 1-Decemb	per 31, 2004	347.74
January 1-Decemb	per 31, 2005	678.39
All Years Through	h December 31, 2005	6,867.21

<sup>\*</sup>Most mitigation land was dedicated in lieu of paying the Acquisition Fund portion of the NBHCP fee. Metro Air Park has paid fees on 233.52 acres of its Initial Tier 1 development.

<sup>\*</sup> This assumes that Metro Air Park has received grading permits on all of its fee-paid acreage.

- Surplus land. The City of Sacramento has accepted fees on 6,550.35 acres of development and Metro Air Park has paid fees on 316.76 acres. After backing out the 200 acres of supplemental mitigation in the Metro Air Park 316.76 acres, this requires 3,333.615 acres of mitigation if grading permits are ultimately issued for all acreage on which fees have been paid. Add back in the Metro Air Park 200-acre supplemental mitigation and add the 200-acre cushion required each year at May 1, and the total ultimate mitigation obligation at December 31, 2005 is 3,733.56 acres. With 3,965.4587 acres in hand, the Conservancy has a surplus of 231.8987 acres. With other unallocable land totaling 97.7689 acres, there are 134.13 surplus acres.
- Adjustments for actual mitigation and resultant surplus. Actual land mitigation requirements are applied to land disturbed for development purposes, not fee-paid acres. The City of Sacramento has authorized 6,286.5 acres and Metro Air Park has converted 109.07 acres of its 233.52 acres for development. Combined, this is a total of 6,395.57 acres required mitigation at December 31, 2005. At the 0.5:1 mitigation ratio, 3,197.785 acres of mitigation is required. Add to that the 200 acres of supplemental mitigation required of Metro Air Park and the 200-acre cushion at May 1 of each year, and the total actual required mitigation acreage is 3,597.785.6 Therefore, the Conservancy has a surplus of mitigation land of 367.6737 acres.7

May 1 of each year, and the total actual required mitigation acreage is 3,597.785.6 Therefore, the Conservancy has a surplus of mitigation land of 367.6737 acres.7

<sup>5</sup> Calculated as follows: 6,550.35 City plus 316.76 for Metro Air Park equals 6,867.22 acres, less 200 Metro Air Park supplemental mitigation equals 6,667.22 acres at 0.5:1.0 mitigation ratio equals 3,333.61 acres.

<sup>6</sup> Calculated as follows: the sum of the City's 6,286.5 plus Metro Air Park's 109.07 divided by the 0.5:1 mitigation ratio equals 3,197.785 plus 200 acres of Metro Air Park supplemental and 200-acres May 1 cushion equals 3,597.785.

From the total land holdings, 84.83 is reserved for mitigation on the Conservancy's Tufts tract (42.415 acres of which were conferred to Griffin Industries by Opus West in 2005 but which have yet to be used and 42.415 acres of mitigation credit owing to Opus West but which are yet to be used). An additional 5.7579 acres is allocated to RD1000 mitigation, 7.681 acres for Sacramento County Regional Sanitation's Lower Northwest Interceptor project equals 298.2689 acres of Conservancy-owned land that is not allocable for future HCP mitigation. This calculation does not include reservations for land on which fees have been paid but no mitigation land has been set aside.

TABLE 3
THE NATOMAS BASIN CONSERVANCY
LAND ACQUISTION TALLY THROUGH 12.31.05

PROPERTY	DATE ACQUIRED	ACRES	
Silva	1.7.99	159.200	
Betts	4.5.99	138.992	
Kismat	4.16.99	40.29	
Bennett (C.L.)	5.17.99	226.675	
Bennett (H&B)	5.17.99	132.486	
Lucich North	5.18.99	267.986	
Lucich South	5.18.99	351.889	
Brennan	6.15.00	241.376	
Frazer	7.31.00	92.600	
Souza*	7.2.01	44.680	
Natomas Farms	7.9.01	96.460	
Ayala	2.20.02	317.3674	
Sills**	7.15.02	436.4059	
Alleghany 50	11.7.02	50.2601	
Cummings	11.7.02	66.8307	
Atkinson	6.12.03	205.397	
Ruby Ranch	6.23.03	91.078	
Huffman West***	9.30.03	181.003	
Huffman East	9.30.03	135.746	
Tufts****	9.29.04	147.95	
Rosa East	3.24.05	106.2827	
Rosa Central	3.24.05	100.015	
Bolen North	4.29.05	113.619	
Bolen South	4.29.05	102.381	
Vestal South	9.12.05	94.951	
Total		3,941.9238	

<sup>\*</sup> Agreement of Purchase and Sale requires 3.68 acres can be purchased back from the Conservancy.

<sup>\*\* 139.15</sup> acres of the original 575.5559 acres of the Sills tract was exchanged for the two Rosa tracts on March 24, 2005.

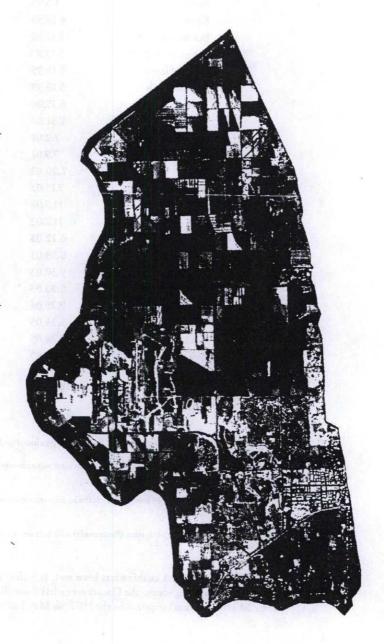
<sup>\*\*\*</sup>The Huffman West tract and 19 acres of the Huffman East tract is for supplemental mitigation required of Metro Air Park.

<sup>\*\*\*\*63.116</sup> acres for Opus West mitigation (Promenade) with balance, 84.834, available for future mitigation,

Annual 200-acre May 1 cushion has been met. It is clear that even with very small
other mitigation obligations, the Conservancy has more than enough acreage to meet
the 200-acre "cushion" required in the HCP on May 1 of each year.

CONSOLIDATION OF PRESERVES. IN THE FISHERMAN'S LAKE RESERVE AREA, THE CONSERVANCY ADDED OVER 200 ADDITIONAL ACRES TO THE FISHERMAN'S LAKE RESERVE AREA. NEARLY ALL OF THE ADDED ACREAGE IN 2005 LIES IN THE SWAINSON'S HAWK ZONE.

Figure 3, LANDSAT photograph of the Natomas Basin. The 2005 LANDSAT photograph shows physical changes that took place in the Natomas Basin. These photos are acquired each year by the Conservancy in order to show changes over time. (See also, "Base Map" in Exhibit 1 for greater delineation of Conservancy land holdings at December 31, 2005.)

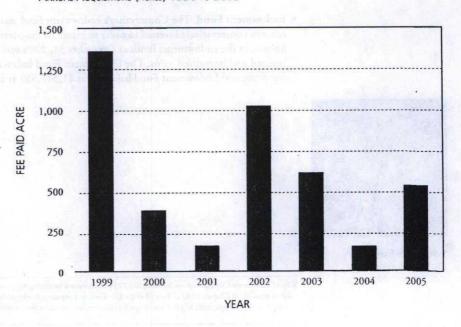


## PROGRAMMATIC

- Property documentation. Phase One environmental reports, American Land Title
  Association (ALTA) land surveys and aerial photographs were completed on each of the
  Conservancy's land acquisitions.
- Biological Effectiveness Monitoring. The second year of comprehensive biological monitoring was completed under the Biological Effectiveness Monitoring Program.
- Required documents submitted. The Conservancy issued a timely implementation annual report, budget, financial audit and all other required reporting documents during the year.

### TNBC HCP LAND ACQUISITION

ANNUAL ACQUISITIONS (ACRES) 1998 TO 2005



## BUDGET AND FINANCE

 Finance Model update. The HCP finance model was updated and a fee increase was requested, granted and implemented.<sup>8</sup>

TABLE 4
THE NATOMAS BASIN CONSERVANCY
HCP FEE HISTORY

YEAY	ESTABLISHED FEE
1997	\$2,240
1998	\$2,656
1999	\$3,292
2000	\$3,942
2001	\$5,993 + \$4,028 premium = \$10,021*
2002	\$7,934 + \$4,028 premium = \$11,962*
2003	\$12,2709
2004	\$16,12410
2005	\$24,89711

<sup>\*</sup>HCP "premium" was established as a result of an agreement to settle litigation, FWS v. Babbitt.

• Endowment Fund. The Conservancy's endowment fund account continues to grow, and remains conservatively invested in order to insure its long-term viability. The total account balance in the endowments funds at December 31, 2005 was \$9,496,216.02. This includes realized and unrealized gains. The Endowment Fund balance was \$8,148,581 and the Supplemental Endowment Fund balance was \$1,347,635 at December 31, 2005.



Swainson's hawk (Buteo swainsoni)

<sup>&</sup>lt;sup>6</sup>City of Sacramento City Council resolution #2005-223 ("A Resolution increasing the amount of the habitat conservation fee established pursuant to Chapter 18.40 of Title 18 of the City Code and requiring developers in Natomas to dedicate land for habitat mitigation in lieu of payment of HCP fees in specific circumstances, to take effect immediately"), approved April 5, 2005.

<sup>9</sup>Also established is a fee of \$7,770 per acre for fee obligations satisfied in part with land dedication.

<sup>&</sup>lt;sup>10</sup>Also established is a fee of \$8,624 per acre for fee obligations satisfied in part with land dedication.

<sup>&</sup>quot;Also established is a fee of \$12,397 per acre for fee obligations satisfied in part with land dedication.

## CONCLUSION

The Conservancy's 2005 was a key year for the organization. The most significant accomplishments were:

- delivery of the first year's comprehensive biological effectiveness monitoring report, with work on a second year which will result in a final report in 2006,
- 2. acquisition of five new properties to integrate into the Conservancy's holdings,
- a land trade which exchanged a portion of one of the Conservancy's preserves at a busy highway intersection with two tracts of land which assist with reserve consolidation and obtaining more biologically-valuable habitat land,
- 4. calibration and refinement of newly-constructed managed marsh to optimize them for their intended function, and
- inclusion in the NBHCP Finance Model of an improved fixed asset accounting system which will ensure retired fixed asset replacement costs are fully accounted and reserved for.

The Conservancy continues to integrate the biological monitoring function (through Jones & Stokes) and the land management and planning function (through Wildlands, Inc.) with Conservancy staff coordination and management. The specialties and resources of all three groups is occasionally supplemented by other specialists to address most any question or need the Conservancy might have. Calling on the additional resources that make up the NBHCP Technical Advisory Committee (TAC) round out the extensive resources available to the Conservancy.

## FUTURE PLANS

The year 2006 will be characterized by conducting the necessary work to incorporate the newly-acquired tracts into the habitat system. Management activity will be focused primarily in the following areas:

- 1. develop Site-Specific Management Plans for the five newly acquired properties,
- coordination and completion of the expanded Bennett North managed marsh construction effort,
- integration of the Conservancy's annual budget into the HCP-required Finance Model so that duplication is reduced and financial planning works off of one set of numbers rather than two,
- coordination with Sutter County officials as they map and plan the Measure M development, and do so in a manner that preserves or enhances the integrity of the system of reserves the Conservancy owns and manages,
- 5. the biggest level of effort to date in accomplishing reserve consolidation, and
- extensive oversight of financial planning to ensure that the HCP fee is adequate to fully fund implementation efforts.

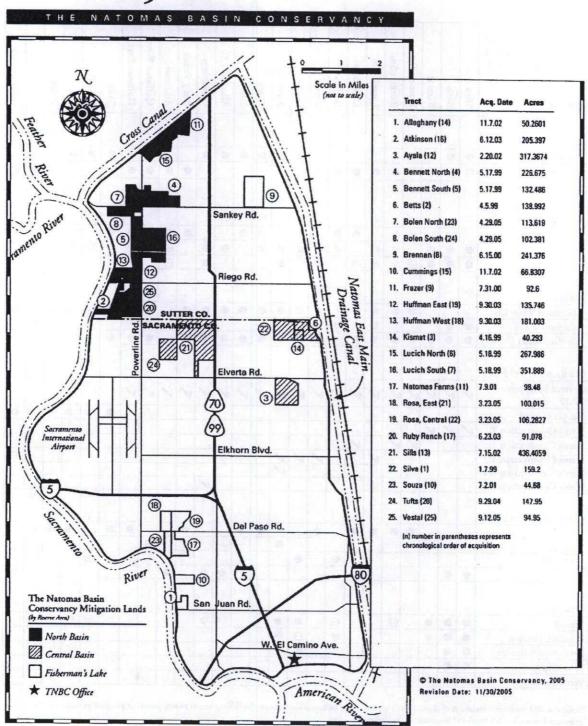
Further information can be obtained by logging on to the Conservancy's web site (www.natomasbasin.org) or contacting the Conservancy directly.

TABLE 4
THE NATOMAS BASIN CONSERVANCY
GENERAL RESERVE CHARACTERISTICS ILLUSTRATION\*

Mitigation land tracts in order of acquired date **  Characteristic	Silva	Betts	Kismat	Bennett No.	Bennett So.	Lucich No.	Lucich So.	Brennan	Frazer	Souza	Natomas Farms	Ayala	Sills	Alleghany 50	Cummings	Ruby Ranch	Atkinson	Huffman West	Huffman East	Tufts	Rosa East	Rosa Central	Bolen North	Bolen South	Vestal South
Characteristic	S	B	X		E	1	1	щ	F	S	-	-	S	-		м	-	-	-				_	- 0	
COUNTY			i he								1	4							No.						
Sacramento	•	•	•						- 28	•	•	•	•	•	•					•	•	•			
Sutter	Θ	Θ	Mali	•	•	•	•	•	•							•	•	•	•	1			•	•	•
PREDOMINANT LAND USE (2005)			Z II		8								E Xª	all o										No.	
Rice		Hari			•		•	•				•	•			•	•		•	•					•
Upland	•	•	•		•	0		•	0	•	•	•	119	•	•		0	•	0	119	•	•	•	•	
Marsh	•	•	•	Θ	•	•	θ		•		•				•	_	θ		el e						71
WATER			m	1														€.		B					
Natomas Water Co.				•	•		•		•	•		•	•	•	•		0	C	•	•	•	•	•		
Ground Water		•	75	-				•	•					Ť			0	•						•	
Surface Water									•		•		•	•	•		0	•	•	•					
MANAGEMENT PLAN Covered by Approved SSMP	V	V	~	~	~	V	~	V	V	V	V	V	~	v	~	V	~	~	V						
Not yet covered														8				174	Z.	•	•	•	•	•	•
Marsh Construction '01	V	V	V											10	N				10					Y.	
Marsh Construction '02				V	V		V	0	11												10		and its		
Marsh Construction '03						V			V	V	V		T.SY												
Marsh Construction '04					15	1	1				V													1	
Marsh Construction '05			(m)	uje l	15			1							V									W.	
BUT Deep Just			Lac.		101		W										-		-				35		
EXISTING TREES	197	14	1751	68	8							1		1	1						1	6		_	
0						•	•	_				•	•			•		-	•	•	-	•		•	-
1 – 10	parts.	dist	•	-	-				_			-	-						-	-					-
11 – 30				-	-	_			-	•	-	-	1		-	-	-	-						-	-
31+		•	-	-		1		-	-	-	-	-	8	•	•		•	-	-	-	-	-	-	-	•
OTHER											-	1	ES.	351	C.B.		B					100	MI	SI.	
Fenced					0			0							•			_			0	0		-	
Livestock Grazing								•		0							_					34			
Residential Structure														1						-					
Farm Structure(s)	•										1			1		1								-	_
Vernal pools	1		100					1		1	1		1		1	1			1					1	1

<sup>\*</sup>Solid dot (①) represents inclusion of characteristic on that tract; hollow-strikethrough dot (①) represents minor, partial or planned inclusion on the referenced tract; a check mark (✔) represents completion of project.

# 2005 BASE MAP





The Natomas Basin Conservancy 2150 River Plaza Drive, Suite 460 Sacramento, CA 95833

Phone: 916.649.3331 FAX: 916.649.3322

Tim Harrison (State) Compressive of Late Press, Place Chross, Pales State Green and Call (1983)

age realists age



The Natomas Basin Conservancy 2150 River Plaza Drive, Suite 460 Sacramento, CA 95833

Phone: 916.649.3331 FAX: 916.649.3322

# IMPLEMENTATION ANNUAL REPORT EXECUTIVE SUMMARY

CALENDAR YEAR 2006 APRIL 30, 2007

#### Pg. SECTION

- 2 INTRODUCTION
- 3 LAND ACQUISITION
- 5 MITIGATION LAND BALANCES
- 9 PROGRAMMATIC
- 10 BUDGET AND FINANCE
- 11 CONCLUSION
- 12 FUTURE PLANS

OTHE NATOMAS BASIN CONSERVANCY 2007

## INTRODUCTION

This report responds to a requirement of the 2003 Natomas Basin Habitat Conservation Plan (NBHCP) and Implementation Agreement (IA) which calls for an implementation annual report. The 2003 NBHCP is supported by permits issued to the Conservancy by the California Department of Fish and Game (issued July 10, 2003; permit number 2081-20032-019-02) and the U.S. Fish and Wildlife Service (issued June 27, 2003; permit number TE073667-0).



Giant garter snake (Thamnophis gigas)

The 2006 Implementation Annual Report comes in three parts. First, this Executive Summary. The reader will get a reasonably comprehensive account of the 2006 reporting from this portion of the Implementation Annual Report, but the "Task Reference and Description" matrix ("2 of 3") provides detail on every task requirement in the 2003 NBHCP. Third, the Appendices. The Appendices ("3 of 3") are an integral part of the 2006 Implementation Annual Report.

The Conservancy's land holdings have been accumulated at a rate far faster than predicted when the first NBHCP was adopted. Notwithstanding this rapid growth, the Conservancy's "plan operator" functions have been carried out according to plan. For example, the Conservancy has completed restoration and enhancement construction projects on 10 of its preserves. It is approximately four-fifths of the way to assembling the 2,500-acre contiguous preserve. At December 31, 2006, it had \$11,575,109 in endowment funds. Importantly, the Conservancy successfully conducted its annual comprehensive, integrated biological effectiveness monitoring report.

Even with this activity, the Conservancy has kept overhead to a minimum, and continues to implement the NBHCP with a staff of three.

A total of 2,023 acres are contiguous in the Conservancy's North Basin Reserve Area; an additional 360.586 is nearly adjacent

## LAND ACQUISITION

Additional acreage acquired in 2006. The Conservancy acquired additional land in 2006. Acquisition activity took place as presented in Table 1. In terms of land acquisition activity, 2006 was a busy year. A total of five acquisitions were made totaling 766.864 acres, reduced by 559.743 acres that were exchanged. The net difference is 207.121 acres. The exchanges also resulted in an easement over an access area of 3.54 acres.

TABLE 1
2006 LAND ACQUISITION DETAIL

TRACT ACQUIRED	DATE OF ACQUISITION	ACRES	MANNER OF ACQUISITION
Bolen East	09.1.06	155.141	Property exchange <sup>2</sup>
Nestor	09.1.06	233.160	Property exchange
Frazer South	11.7.06	110.372	Property exchange <sup>3</sup>
Bianchi West	11.7.06	110.161	Property exchange
Vestal South	11.7.06	158.031	Property exchange
Total 2006 acquire	ed acres	766.864	
Less exchanged ac	res	559.743	mamin mense colliborioper
Net Additional act	reage	207.121	

The reason for the exchanges was to:

- 1. substantially reduce preserve fragmentation and therefore help achieve preserve consolidation,
- 2. exchange less desirable land for better land based on wildlife biology values, and
- 3. secure substantially greater numbers of overall acres than were released.

A graphic representation of the combined total of the Conservancy's land holdings at December 31, 2006 can be found in Exhibit 1, attached to this report (see "2006 Base Map"). This map is frequently updated and can always be found on the Conservancy's web site (www.natomasbasin.org).



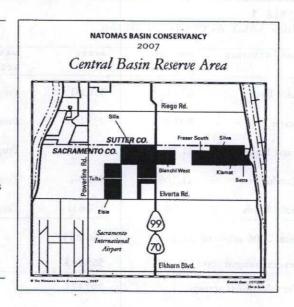
<sup>&</sup>lt;sup>2</sup> In the exchange that resulted in the acquisition of the Nestor and Bolen West tracts (combined total of 388.301 acres), the Conservancy exchanged the Brennan tract at 242.376 acres.

<sup>&</sup>lt;sup>3</sup> In the exchange that resulted in the acquisition of the Frazer South, Bianchi West and Elsie tracts (combined total of 378.563 acres), the Conservancy exchanged the Ayala tract at 317.3674 acres). Additionally, at year-end 2006, the Conservancy technically owned 158.846 acres of the Frazer South tract (rather than the 110.372 acres posted above) and 160.55 acres of the Bianchi West tract (rather than the 110.16 listed above), but was contractually bound to reconvey the northerly 800-foot setback area to the entity the Conservancy acquired it from. By year end, this had not yet happened.

Preserve consolidation. In one of the biggest achievements in the Conservancy's history,
 2006 saw very substantial preserve consolidation. Preserve consolidation is called for in the
 NBHCP, and biological monitoring reports mentioned the goal each year.

There were other benefits to the land exchanges as well. The Conservancy was able to secure substantial acreage premiums (a minimum of 136.187 acres, with more acreage in the future a likelihood). Additionally, the land acquired was substantially richer biologically than the land rendered for exchange by the Conservancy based on extensive monitoring results and evaluations.

Figure 1. Acquisition of the Frazer South, Bianchi West and Elsie Tracts advance consolidation of preserves in the Central Basin Reserve Area. Acquisition of these tracts in 2006 helped further efforts to consolidate Conservancy land into larger, contiguous preserves. The map at right displays the acquisitions and how they relate to existing land holdings in the Conservancy's Central Basin Reserve Area. Note the Betts, Kismat and Silva tracts are now joined by the Frazer South tract, thus achieving the NBHCP's required 400-acre minimum contiguous preserve.



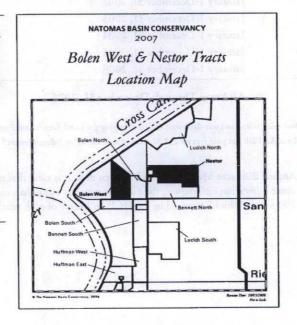
Total land acquired through 2006. The Conservancy has acquired a total of 4,184.9005 acres in total as of December 31, 2006. Easements represent 27.0749 acres of this total. There have been 1,766.1482 acres acquired in Sacramento County and 2,414.5111 acres in Sutter County.<sup>4</sup> Not all acres have been committed to HCP mitigation.

<sup>&</sup>lt;sup>4</sup>A very small remainder is supplemental mitigation.

#### MITIGATION LAND BALANCES

- Acreage upon which fees have been paid. Fees related to development in the City of
  Sacramento permit area have been paid on a total of 6,681.67 acres, including 132.27 acres
  added in 2006. Through Metro Air Park's participation, there have been HCP fees paid
  on an additional 317.81 acres. Combined, there have been fees paid on 6,999.48 acres of
  development.
- Fees paid.<sup>5</sup> The amount of HCP fees paid by development in the City of Sacramento Permit Area total \$56,226,118.07 from inception to date, and \$5,812,354.85 during 2006. For Metro Air Park, total fees paid equal \$5,698,003.97 (including HCP and other mitigation) to date and zero in 2006. Combined, the total amount of fees and fee-related income paid from inception to date totals \$62,149,992.32. (All figures include the land value of in-lieu land dedication).

Figure 2. Acquisition of **Nestor and Bolen West tracts** advance consolidation of preserves. Acquisition of the two tracts in 2006 helped further efforts to consolidate Conservancy land in the North Basin Reserve Area. The map at right displays the acquisitions and brings to 2,023 acres acquired in the Conservancy's North Basin Reserve Area. The Conservancy is required to assemble a 2,500-acre (minimum) contiguous reserve.



- Acreage on which an urban development permit have been issued. The City of Sacramento reports it has authorized grading on 6,286.5 acres since inception, and Metro Air Park has developed 109.07 acres of its development.
- Surplus land. At December 31, 2006, there were 294.54 surplus acres of land held by the Conservancy.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> "Fees paid" represents actual HCP fees plus related payments such as Metro Air Park's tree replacement and GGS mitigation, so the sum of City and MAP payments does not equal the total amount of fee and related income received to date. Records of all such payments are found in the schedule titled, "Schedule of Subject Acreage and Fees Paid."

The City of Sacramento has accepted fees on 6,999.48 acres of development for City and Metro Air Park development. After backing out the 200 acres of supplemental mitigation in the Metro Air Park, this leaves 6,799.48 acres with 3,399.74 required for mitigation, meaning there is 750.30 acres of surplus land held by the Conservancy. In addition to the 200 acres of supplemental mitigation, and when the 200 acres of the May 1 buffer is considered, that leaves a surplus of 350.30 acres. When the unallocable or prior committed acres are considered (such as supplemental mitigation), that leaves 294.54 acres of land in surplus.

· Adjustments for actual mitigation and resultant surplus. Actual land mitigation requirements are applied to land disturbed for development purposes, not fee-paid acres. Under this calculation, the Conservancy has a surplus of mitigation land of 367.6737 acres.<sup>7,8</sup>

TABLE 2 THE NATOMAS BASIN CONSERVANCY HCP FEE-PAID ACRES\*



1 Parties	PERIOD	HCP FEE-PAID ACRES*					
	Through December 31, 1998	1,515.66					
	January 1-December 31, 1999	1,465.47					
	January 1-December 31, 2000	598.07					
	January 1-December 31, 2001	242.09					
	January 1-December 31, 2002	777.81					
	January 1-December 31, 2003	1,241.98					
	January 1-December 31, 2004	347.74					
	January 1-December 31, 2005	678.39					
	January 1-December 31, 2006	132.27					
	All Years Through December 31, 2006	6,999.48					

\*Most mitigation land was dedicated in lieu of paying the Land Acquisition Fund portion of the NBHCP fee.

· Annual 200-acre May 1 cushion has been met. It is clear that even with very small other mitigation obligations, the Conservancy has more than enough acreage to meet the 200-acre "cushion" required in the HCP on May 1 of each year.

Metro Air Park has paid fees on 233.52 acres of its Initial Tier 1 development.9

<sup>&</sup>lt;sup>7</sup> Calculated as follows: the sum of the City's 6,286.5 plus Metro Air Park's 109.07 divided by the 0.5:1 mitigation ratio equals 3,197.785 plus 200 acres of Metro Air Park supplemental and the NBHCP's 200-acre May 1 cushion equals 3,597.785. The City of Sacramento has authorized 6,286.5 acres and Metro Air Park has converted 109.07 acres of its 233.52 acres for development. Combined, this is a total of 6,395.57 acres required mitigation at December 31, 2006. At the 0.5:1 mitigation ratio, 3,197.785 acres of mitigation is required. Add to that the 200 acres of supplemental mitigation required of Metro Air Park and the 200-acre cushion at May 1 of each year, and the total actual required mitigation acreage is 3,597.785.

From the total land holdings, 42.83 acres are reserved for mitigation on the Conservancy's Tufts tract (63.12 acres were used by Opus West and 42.01 acres were used by Griffin Industries). An additional 5.7579 acres is allocated to RD1000 mitigation, 7.681 acres for Sacramento County Regional Sanitation's Lower Northwest Interceptor project equals 298.2689 acres of Conservancy owned land that is not allocable for future HCP mitigation. This calculation does not include reservations for land on which fees have been paid but no mitigation land has been set aside.

At December 31, 2006, Metro Air Park had paid fees on 316.76 acres, but 200 acres were for supplemental mitigation (all of the Huffman West tract and 19 acres of the Huffman East tract), leaving 116.76 acres of fee-paid mitigation, or, at the 0.5:1 mitigation ratio, 233.52 acres of development.

TABLE 3
THE NATOMAS BASIN CONSERVANCY
LAND ACQUISTION TALLY THROUGH 12.31.06

	PROPERTY	DATE ACQUIRED	ACRES
	Silva	1.07.99	159.2000
	Betts	4.05.99	138.9920
	Kismat	4.06.99	40.2930
	Bennett (C.L.)	5.17.99	226.6750
	Bennett (H&B)	5.17.99	132.4860
	Lucich North	5.18.99	267.9860
	Lucich South	5.18.99	351.8890
	Frazer	7.31.00	92.6000
	Souza <sup>10</sup>	7.02.01	40.0000
	Natomas Farms	7.09.01	96.4600
	Sills <sup>11</sup>	7.15.02	436.4059
	Alleghany 50	11.07.02	50.2601
	Cummings	11.07.02	66.8307
	Atkinson	6.12.03	205.3970
	Ruby Ranch	6.23.03	91.0780
ATT AND	Huffman West <sup>12</sup>	9.30.03	181.0030
	Huffman East	9.30.03	135.7460
	Tufts13	9.29.04	147.9500
	Rosa East	3.24.05	106.2827
	Rosa Central	3.24.05	100.0150
	Bolen North	4.29.05	113.6190
	Bolen South	4.29.05	102.3810
	Vestal South	9.12.05	94.9510
	Bolen West	9.01.06	155.1410
	Nestor	9.01.06	233.1600
	Frazer South <sup>14</sup>	11.07.06	110.3720
	Bianchi West	11.07.06	110.1600
	Elsie	11.07.06	158.0310
	Total		4,145.3644

<sup>&</sup>lt;sup>10</sup> The long standing litigation filed against the Conservancy was resolved in 2006 through court-ordered settlement. Accordingly, the 4.68 acres of additional land the Conservancy held title to on the Souza tract was deeded over to the plaintiff in the case upon payment of certain funds to the Conservancy.

<sup>11 139.15</sup> acres of the original 575.5559 acres of the Sills tract was exchanged for the two Rosa tracts on March 24, 2005.

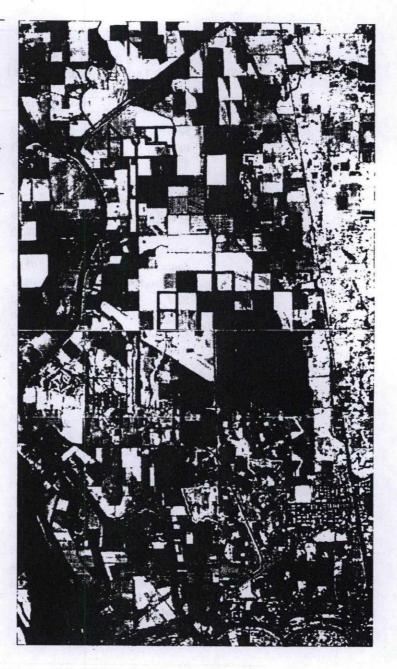
<sup>12</sup> Huffman West tract and 19 acres of the Huffman East tract is for supplemental mitigation required of Metro Air Park.

<sup>13 63.116</sup> acres for Opus West mitigation (Promenade) with balance, 84.834, available for future mitigation.

<sup>&</sup>lt;sup>14</sup> Approximately 40 additional acres may be deeded back to the Conservancy over time under a long-term agreement on this tract.

The same is true with the Bianchi West tract.

Figure 3, LANDSAT photograph of the Natomas Basin. The 2006 LANDSAT photograph shows physical changes that took place in the Natomas Basin. These photos are acquired each year by the Conservancy in order to show changes over time. (See also, "Base Map" in Exhibit 1 for greater delineation of Conservancy land holdings at December 31, 2006.)



### PROGRAMMATIC

- Property documentation. Phase One environmental reports, American Land Title Association (ALTA) land surveys and aerial photographs were completed on each of the Conservancy's land acquisitions.

Swainson's hawk (Buteo swainsoni)

- Biological Effectiveness Monitoring. Required comprehensive biological monitoring was completed under the Biological Effectiveness Monitoring Program.
- Required documents submitted. The Conservancy issued a timely implementation annual report, budget, financial audit and all other required reporting documents during the year.

# BUDGET AND FINANCE

 Finance Model update. The HCP finance model was updated and a fee increase was requested, granted and implemented.<sup>15</sup>

TABLE 4
THE NATOMAS BASIN CONSERVANCY
HCP FEE HISTORY

YEAR	ESTABLISHED FEE
1997	\$2,240
1998	\$2,656
1999	\$3,292
2000	\$3,942
2001	\$5,993 + \$4,028 premium = \$10,021*
2002	\$7,934 + \$4,028 premium = \$11,962*
2003	\$12,27016
2004	\$16,12417
2005	\$24,89718
2006	\$41,18219

<sup>\*</sup>HCP "premium" was established as a result of an agreement to settle litigation, FWS v. Babbitt.

• Endowment Fund. The Conservancy's endowment fund account continues to grow, and remains conservatively invested in order to insure its long-term viability. The total account balance in the endowments funds at December 31, 2006 was \$11,575,109. This includes realized and unrealized gains. The Endowment Fund balance was \$9,926,631 and the Supplemental Endowment Fund balance was \$1,648,478 at December 31, 2006.

<sup>&</sup>lt;sup>15</sup>City of Sacramento City Council resolution #2006-223 ("A Resolution increasing the amount of the habitat conservation fee established pursuant to Chapter 18.40 of Title 18 of the City Code and requiring developers in Natomas to dedicate land for habitat mitigation in lieu of payment of HCP fees in specific circumstances, to take effect immediately"), approved April 5, 2006.

<sup>&</sup>lt;sup>16</sup>Also established is a fee of \$7,770 per acre for fee obligations satisfied in part with land dedication.

<sup>&</sup>lt;sup>17</sup>Also established is a fee of \$8,624 per acre for fee obligations satisfied in part with land dedication.

<sup>18</sup> Also established is a fee of \$12,397 per acre for fee obligations satisfied in part with land dedication.

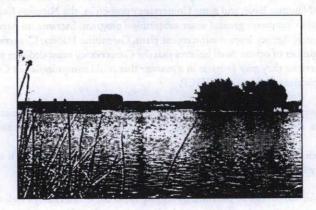
<sup>19</sup> Also established is a fee of \$18,682 per acre for fee obligations satisfied in part with land dedication.

### CONCLUSION

The Conservancy's 2006 was a key year for the organization. The most significant accomplishments were:

- 1. delivery of another comprehensive annual biological effectiveness monitoring report,
- acquisition of five new properties to integrate into the Conservancy's holdings (less two exchanged), which enhanced reserve consolidation, obtained more biologically-valuable habitat land, and yielded 136.187 acres of land over and above that exchanged,
- 3. resolution of longstanding litigation regarding the Souza tract, and
- integration into the Conservancy's annual budget the NBHCP Finance Model so that
  there is complete integration between the two, resulting in more reliable budgeting
  and NBHCP Finance Model results.

The Conservancy continues to integrate the biological monitoring function (through Jones & Stokes) and the land management and planning function (through Wildlands, Inc.), and at the end of 2006, through the successor land management contractor, (Sopwith Farms) with Conservancy staff coordination and management. The specialties and resources of all groups is occasionally supplemented by other specialists to address most any question or need the Conservancy might have. Calling on the additional resources that make up the NBHCP Technical Advisory Committee (TAC) round out the extensive resources available to the Conservancy.



# FUTURE PLANS

The year 2007 will be characterized by conducting the necessary work to incorporate the newly-acquired tracts into the habitat system and addressing channel clearing needed to keep the marsh complexes fully functional. During 2007, Conservancy management activity will be focused primarily in the following areas:

- develop Site-Specific Management Plans (SSMP) for the five newly acquired properties,
- begin the process of the first ever comprehensive review and updating of all of the Conservancy's SSMPs,
- 3. completion of the expanded Bennett North managed marsh construction effort,
- coordination with Sutter County officials as they map and plan the Measure M development, and do so in a manner that preserves or enhances the integrity of the system of reserves the Conservancy owns and manages,
- undertaking the first ever marsh complex channel clearing effort after testing conducted in 2006 demonstrated preferred courses in the manner in which this work should be conducted,
- 6. work to coordinate the numerous external initiatives brought to the Conservancy including Sacramento International Airport expansion plans, a PG&E gas transmission line proposed for the Natomas Basin, including through Conservancy land, a Western Area Power Authority (WAPA) overhead electric transmission line through the Natomas Basin and some Conservancy properties, the Natomas Central Mutual Water Company's ground water substitution program, Sacramento Area Flood Control Agency levee reinforcement plans, Greenbriar Habitat Conservation Plan and a number of others. Staff believes that the Conservancy must dedicate time to these, otherwise they may progress in a manner that could compromise the Conservancy's implementation of the NBHCP,
- 7. planned assumption of certain marsh land management responsibilities after these had been contracted out to Wildlands, Inc. for approximately four years, and
- extensive oversight of financial planning to ensure that the HCP fee is adequate to fully fund implementation efforts.

Further information can be obtained by logging on to the Conservancy's web site (www.natomasbasin.org) or contacting the Conservancy directly.

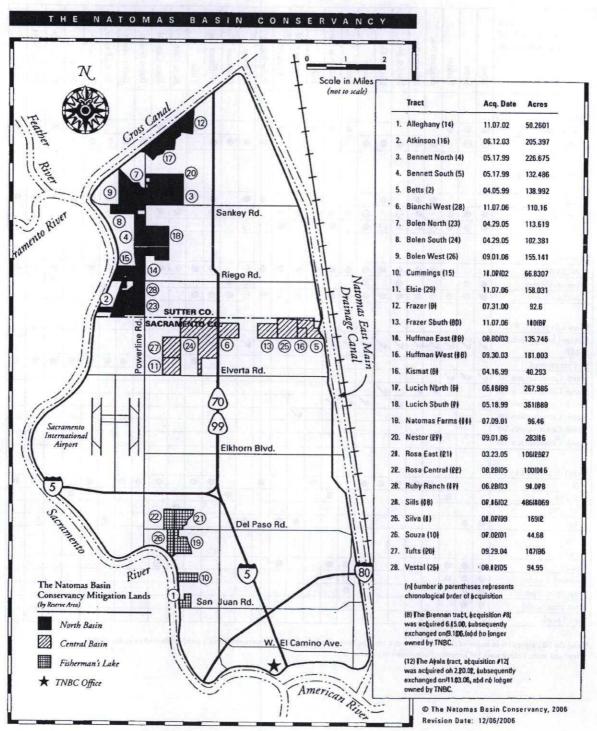


TABLE 4
THE NATOMAS BASIN CONSERVANCY
GENERAL RESERVE CHARACTERISTICS ILLUSTRATION\*

Mitigation land tracts in order of acquired date ⇒ Characteristic	Silva	Betts	Kismat	Bennett No.	Bennett So.	Lucich No.	Lucich So.	Frazer	Souza	Natomas Farms	Sills	Alleghany 50	Cummings	Ruby Ranch	Atkinson	Huffman West	Huffman East	Tufts	Rosa East	Rosa Central	Bolen North	Bolen South	Vestal South	Bolen West	Nestor	Frazer South	Bianchi West	Elsie
COUNTY										3		1								Q.			10 miles					
Sacramento	•	•	•						•	•	•	•	•	9				•	•	•	134				30	•	•	•
Sutter	0	θ		•	•		•	•						•	•	•				45	•	•	•	•	•			
PREDOMINANT LAND USE (2006)	20	The state of	45.		on all	1							1								THE STATE OF	7		X		200		
Rice				•	•		•				•	11		•	•		•	•					•	•	•	•	•	•
Upland	•	•	•		•	0		0	•	•			•		0	•	0		•	•	•	•						_
Marsh	•	•	•	0	•	•	θ	•					•		0								1/4			107		
WATER	Property of			192	2 19	200																5	1				993	100
NCMWC				•				•		•	•		•	•	0			•	•	•	•	30		•	•	•	•	•
Ground Water		•				•		•		1					θ	•		-	-1									
Surface Water							•	•		•	•	•	•		θ	•	•	•					13					
MANAGEMENT PLAN Covered by Approved SSMP	V	~	~	~	~	V	V	V	~	~	V	~	~	~	V	~	~			e.v	10 0198							
Not yet covered							100			14													•	•	•	•	•	
Marsh Construction '01	V	V	V											100	EII	TWO I		10										
Marsh Construction '02				V	V		V	N																	2			
Marsh Construction '03	0		100	100		V		V	V	V							1											
Marsh Construction '04		11100				140			1			V																-
Marsh Construction '05																16	6								The state	42	N	
Marsh Construction '06	PV																											
Existing Trees			Jed Mai	la si		100								1010								100					1	
0					•									•			•	•		•						•		
1-10								1																	•			
11 – 30																			•						1			
31+									1			•		122.5				10			_			1				1
OTHER .	DE N			87		i i														3			1	1	6			
Fenced				A	0	l n		1					•		1				0	0			1					-
Livestock Grazing		•							0								10				134						_	
Residential Structure																							19			129		
Farm Structure(s)													-				1											10
Vernal pools	1				1				1											1	1	1	1	1	1	1	1	

<sup>\*</sup>Solid dot ( ) represents inclusion of characteristic on that tract; hollow-strikethrough dot ( ) represents minor, partial or planned inclusion on the referenced tract; a check mark ( ) represents completion of project.

# 2006 BASE MAP





The Natomas Basin Conservancy 2150 River Plaza Drive, Suite 460 Sacramento, CA 95833

Phone: 916.649.3331 FAX: 916.649.3322

April Construction (September 1980)