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IMPLEMENTATION ANNUAL REPORT

EXECUTIVE SUMMARY

CALENDAR YEAR 2022

APRIL 30, 2023

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INTRODUCTION TO THE IMPLEMENTATION ANNUAL REPORT

This report responds to a requirement of the 2003 Natomas Basin Habitat Conservation Plan (NBHCP) and Implementation Agreement (IA) calling for an implementation annual report. The 2003 NBHCP is supported by permits issued to the Conservancy by the California Department of Fish and Wildlife (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).

LAND ACQUISITION



Additional mitigation acreage acquired. Mitigation property was acquired in 2022. Conservancy land holdings as of December 31, 2022 are shown in Figure 11, attached to this report. This map is frequently updated and can always be found on the Conservancy’s web site (natomasbasin.org).

Total land acquired through 2022. The Conservancy had acquired 5,182.64 acres at December 31, 2022. Easements represent 143.68 acres of this total. There have been 2,215.67 acres acquired in Sacramento County and 2,966.42 acres in Sutter County¹. Not all acres have been committed to HCP mitigation (see discussion on surplus land acquisitions below).



FIGURE 1
In 2022, the Conservancy’s preserves were visited by Bald eagles (*Haliaeetus leucocephalus* or *H. washingtoniensis*). This is rare for the Natomas Basin. (Conservancy staff photo taken on Conservancy preserves.)

MITIGATION LAND BALANCES

- **Acreage upon which fees have been paid.** In the City of Sacramento Permit Area, fees have been paid on 6,872.23² acres. Including Metro Air Park, there have been fees paid on 837.60 acres and an additional 200 acres of non-HCP mitigation. Combined with non-HCP acres of 118.84 and Sutter County acres of 518.14, there have been fees paid on a total of 8,546.80 acres of development.

TABLE 1
HCP FEE-PAID AND SUPPLEMENTAL ACRES*

PERIOD	HCP AND NON-HCP FEE-PAID ACRES
Through December 31, 1998	1,515.66
January 1 – December 31, 1999	1,466.45
January 1 – December 31, 2000	598.07
January 1 – December 31, 2001	242.60
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	132.28
January 1 – December 31, 2007	103.15
January 1 – December 31, 2008	19.11
January 1 – December 31, 2009	24.60
January 1 – December 31, 2010	5.07
January 1 – December 31, 2011**	50.00
January 1 – December 31, 2012	122.12
January 1 – December 31, 2013	0.05
January 1 – December 31, 2014	0.00
January 1 – December 31, 2015	5.65
January 1 – December 31, 2016	75.85
January 1 – December 31, 2017	56.00
January 1 – December 31, 2018	36.83
January 1 – December 31, 2019	100.38
January 1 – December 31, 2020	218.12
January 1 – December 31, 2021	81.39
January 1 – December 31, 2022	647.51
All Years Through December 31, 2022	8,546.81

*Most mitigation land was dedicated in lieu of paying the Land Acquisition Fund portion of the NBHCP fee.

**While no development was reported for 2011, by instruction from U.S. Fish and Wildlife Service, a negotiated commitment from Sutter County to mitigate for a development several years prior was recorded in 2011 (SYSCO).



FIGURE 2
A severe drought impacted Conservancy operations in 2022 to the point many fields were left dry. The U.S. Bureau of Reclamation delivered 18 percent of contracted water amounts to all Sacramento River Settlement Contractors in 2022, which includes water deliveries to the Conservancy's water provider. The Conservancy allocated its limited water supplies first to its managed marsh complexes in order to make certain each had enough water to sustain the HCPs' Covered Species that rely on them. (Conservancy staff photo on Conservancy mitigation land in 2022.)

- **Fees paid.**³ The amount of HCP fees paid by development in the City of Sacramento Permit Area totals \$63,182,776.41 from inception to date. For Metro Air Park, total fees paid equal \$36,777,605.03 (including HCP and other mitigation) to date and including the final payment for Tier One impacts of \$515,111.00 in 2013. Fees from Sutter County from inception to date, \$21,750,364.77, have been paid. Combined with non-HCP mitigation fees of \$5,800,060.38, the total amount of fees and fee-related income paid from inception to date totals \$127,510,806.59⁴. These totals go back over 20 years and are not adjusted for inflation.
- **Acreage on which an urban development permit has been issued.** At the time of publication, the Conservancy reports authorized grading for the City of Sacramento of approximately 6,872.23 acres since inception, Metro Air Park, approximately 837.60⁵ acres and Sutter County, 518.14 acres.
- **Surplus land.** As of December 31, 2022, the Conservancy held 259.10 acres of surplus approved mitigation land.⁶
- **Annual 200-acre May 1 cushion has been met.** The Conservancy had more than enough acreage to meet the 200-acre “cushion” required in the HCP on May 1 of each year, and this includes the Conservancy’s land holdings position for 2022.

FIGURE 3

In 2022, the Conservancy received its largest ever mitigation fee. This was for the Sutter Pointe (“Lakeside”) project in South Sutter County. (NCMWC staff photo in 2022.)



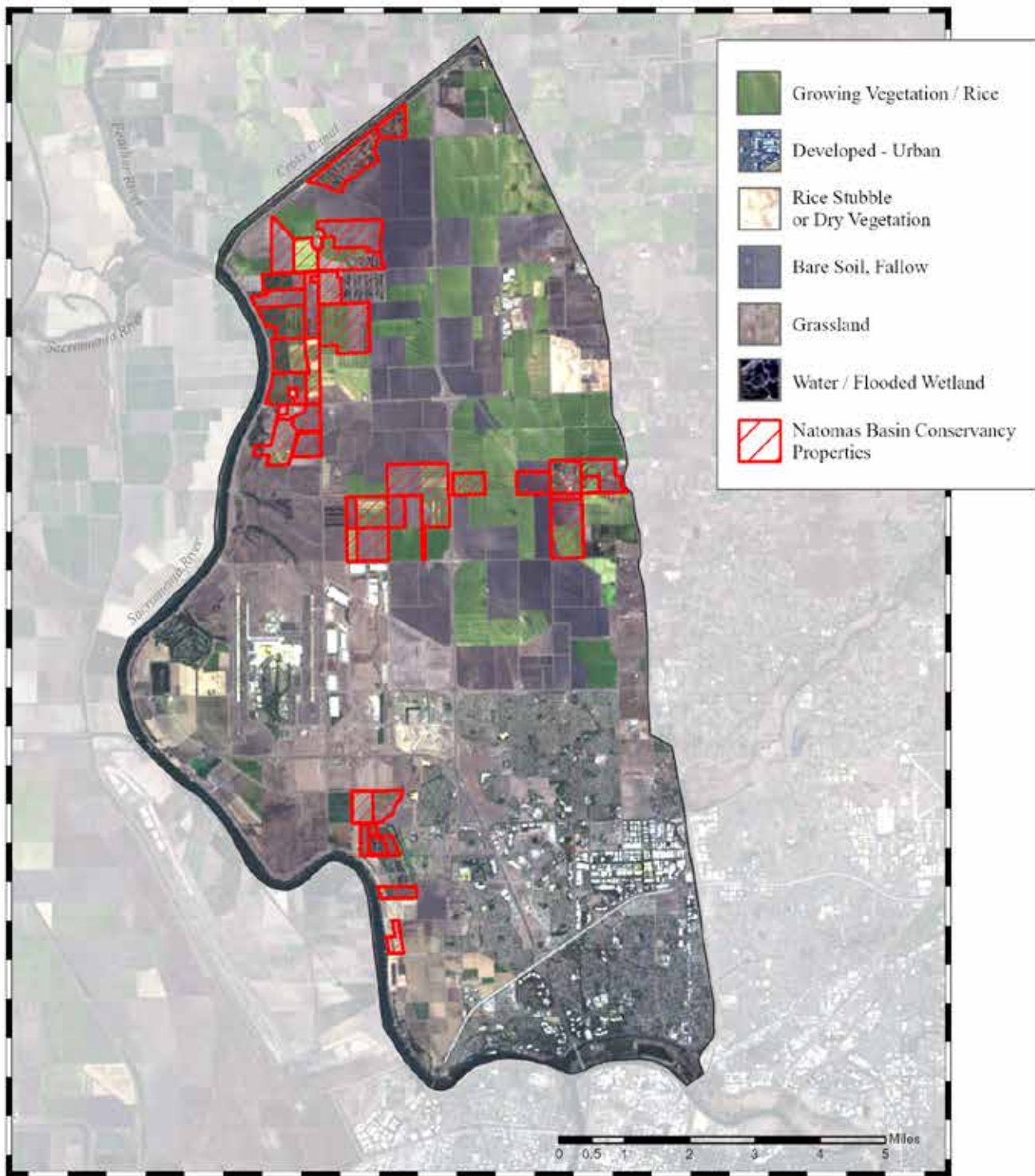
FIGURE 4

The Conservancy used special grant funds for a supplemental enhancement on the Pond O section of its Silva tract. The project was partly experimental in that the Conservancy utilized its experience and biological effectiveness monitoring to suggest design concepts likely to further enhance Giant garter snake (*Thamnophis gigas*) habitat. (Conservancy staff photo on Conservancy mitigation land in 2022.)



TABLE 2
 THE NATOMAS BASIN CONSERVANCY
 LAND ACQUISITION TALLY THROUGH 12.31.22
 (SEE FOOTNOTE INFORMATION; DOES NOT INCLUDE EASEMENTS⁷)

PROPERTY	DATE ACQUIRED	ACRES
Silva	01.07.99	159.20
Betts	04.05.99	138.99
Kismat	04.16.99	40.46
Bennett (C.L.)	05.17.99	226.68
Bennett (H&B)	05.17.99	132.49
Lucich North	05.18.99	267.99
Lucich South	05.18.99	351.89
Frazer	07.31.00	92.60
Souza ⁸	07.02.01	40.00
Natomas Farms	07.09.01	55.28
Sills ⁹	07.15.02	436.41
Alleghany 50	11.07.02	50.26
Cummings	11.07.02	66.83
Atkinson	06.12.03	199.21
Ruby Ranch	06.23.03	91.08
Huffman West ^{10, 11}	09.30.03	157.76
Huffman East	09.30.03	135.75
Tufts ¹²	09.29.04	147.95
Rosa East	03.24.05	106.28
Rosa Central	03.24.05	100.02
Bolen North	04.29.05	113.62
Bolen South	04.29.05	102.38
Vestal South	09.12.05	94.95
Bolen West ¹³	09.01.06	155.03
Nestor	09.01.06	233.16
Frazer South ¹⁴	11.07.06	110.37
Bianchi West	11.07.06	110.16
Elsie	11.07.06	158.03
Silva South	09.28.12	29.12
Richter	01.03.20	80.75
Lauppe South	06.30.20	171.84
Paulsen South	09.28.20	52.46
Willey	10.19.20	108.14
Elverta	07.13.21	287.71
Lauppe North	01.05.22	185.42
Paulsen Central	08.12.22	48.70
Total		5,038.97



LANDSAT 9 - September 24, 2022

FIGURE 5
 LANDSAT photograph of the Natomas Basin. The 2022 LANDSAT photograph shows the status of the Natomas Basin on September 24, 2022. Such photos are acquired each year by the Conservancy in order to show changes over time. See also, "Base Map" in Figure 11, for greater delineation of the Conservancy land holdings at December 31, 2022.

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BUDGET AND FINANCE

- Finance Model update.** The HCP Finance Model was updated and approved by the Conservancy’s Board of Directors, the City of Sacramento City Council and by resolution of the Board of Supervisors of Sutter County. The 2022 HCP Mitigation Fee was \$43,968 (\$27,718 with land dedication), which was an increase from the 2021 HCP Mitigation Fee of \$40,032 (\$25,032 with land dedication).

TABLE 3
THE NATOMAS BASIN CONSERVANCY
HCP FEE HISTORY

YEAR	ESTABLISHED FEE
1997	\$2,240
1998	\$2,656
1999	\$3,292
2000	\$3,941
2001	\$5,993 + \$4,028 premium = \$10,021*
2002	\$7,934 + \$4,028 premium = \$11,962*
2003	\$12,270 (\$7,770 w/land)
2004	\$16,124 (\$8,624 w/land)
2005	\$24,897 (\$12,397 w/land)
2006	\$41,182 (\$18,682 w/land)
2007	\$38,445 (\$18,445 w/land)
2008	\$38,133 (\$20,633 w/land)
2009	\$38,133 (\$20,633 w/land)
2010	\$44,050 (\$26,550 w/land)
2011	\$37,547 (\$22,547 w/land)
2012	\$32,861 (\$21,611 w/land)
2013	\$27,419 (\$18,669 w/land)
2014	\$32,259 (\$21,009 w/land)
2015	\$32,259 (\$21,009 w/land)
2016	\$32,259 (\$21,009 w/land)
2017	\$31,600 (\$20,350 w/land)
2018	\$33,091 (\$21,841 w/land)
2019	\$33,091 (\$21,841 w/land)
2020	\$40,032 (\$25,032 w/land)
2021	\$40,032 (\$25,032 w/land)
2022	\$43,968 (\$27,718 w/land)

*HCP “premium” was established as a result of an agreement to settle litigation, *FWS v. Babbitt*.

- **Endowment Fund.** The Conservancy’s endowment funds remain conservatively invested. The total account balance in the endowment fund at December 31, 2022 was \$33,369,158 versus \$34,945,235 for the December 31, 2021 balance. The decline was due to a downturn in the market. For the Supplemental Endowment Fund, the total account balance at December 31, 2022 was \$1,989,111 versus \$3,443,433 for the December 31, 2021 balance. This decline was due to a Board-approved transfer to facilitate the purchase of the Conservancy’s Lauppe North tract. With the acquisition of this property, the Conservancy was able to achieve a 2,500 contiguous acre preserve area.

Account balances in the Conservancy’s endowments funds have moved upwards very nicely from their low in 2008. But in 2022, equity markets turned negative, and the funds’ account balances declined accordingly. Investments are tightly controlled via an investment policy reviewed and approved by the Conservancy’s Board of Directors and followed by the organization’s investment manager. See the Conservancy’s December 31, 2022 audited financial statement for details.

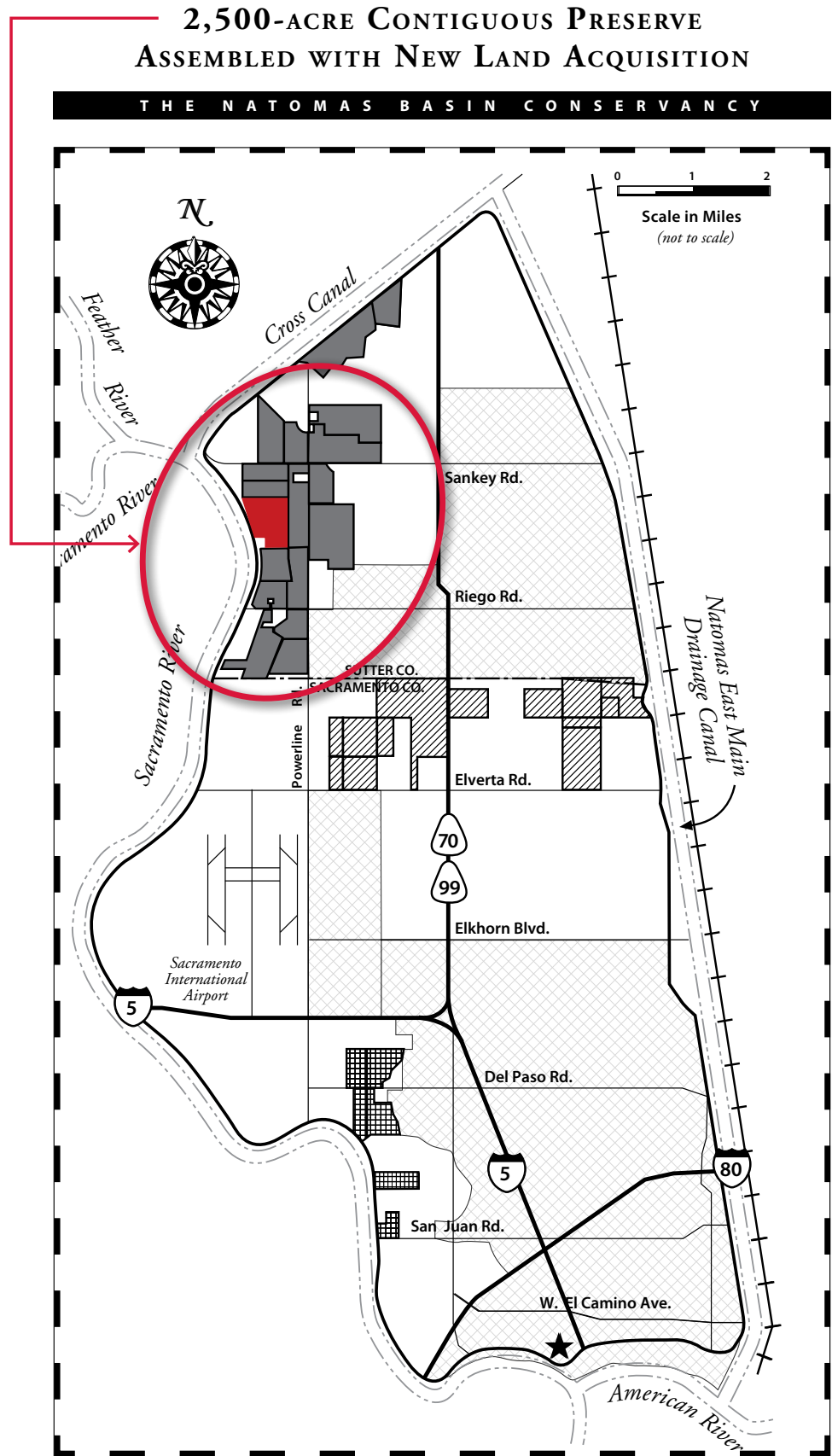
FIGURE 6

In 2022, the Conservancy initiated an experiment in a large rice field to see if non-rice cover vegetation produces prey for the Swainson’s hawk (*Buteo swainsonii*). By leaving rice stubble in place rather than working it in to the soil, and then over-seeding with other cover crop types, it is hoped that preferred prey for the hawk will be produced and made available. (Conservancy staff photo on Conservancy mitigation land in 2022.)



FIGURE 7

The most challenging requirement thought to be in the Natomas Basin Habitat Conservation Plan (NBHCP) is the accumulation of 2,500 acres of contiguous NBHCP-compliant and approved mitigation land. Early in 2022, with the acquisition of the Lauppe North tract, the Conservancy met and surpassed that requirement. Assembling larger contiguous parcels adds to the biological integrity of mitigation land.



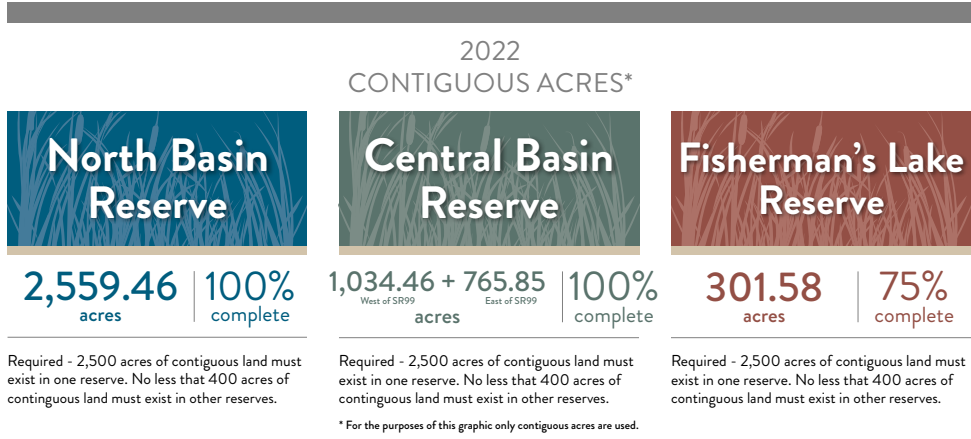


FIGURE 8
A Burrowing owl (*Athene cunicularia*) is standing tall and posing for a photo for Conservancy staff on Conservancy mitigation land in 2022.

CONCLUSION

In 2022, Conservancy preserves matured and provided still greater habitat benefits to the NBHCP's "Covered Species." Also in 2022, biological effectiveness monitoring efforts recovered from the challenges by SARS-CoV-2 and severe wildfire. Key accomplishments for 2022 are highlighted below:

1. completion of significant mitigation land acquisitions which added 234.123 acres to the Conservancy's mitigation land holdings. For the last three years combined, the Conservancy acquired a total of 935.02 acres. This represents a significant increase in the Conservancy's mitigation land holdings,
2. the Conservancy announced that with the acquisition of a 185-acre parcel of mitigation land (Lauppe North tract), the Conservancy completed assembly of a 2,500-acre contiguous preserve. Acquiring a contiguous 2,500-acre assemblage of mitigation land is a critical compliance requirement of the NBHCP, and was achieved decades ahead of schedule even though numerous experts believed this to be the most challenging requirement in the NBHCP,
3. mostly during the first portion of 2022, the Conservancy needed to manage through the waning vestiges of the SARS-CoV-2 pandemic which limited staff and contractor availability,
4. delivery of another comprehensive annual biological effectiveness monitoring report,
5. the Conservancy completed the phasing out of Conservancy land management activities on behalf of Sacramento Area Flood Control Agency (SAFCA) following 12 years of a land management arrangement, helping SAFCA transition to more permanent property oversight,
6. managed over 250 operating contracts as well as numerous additional compliance reporting obligations,
7. though account balances declined in 2022 due to down markets, the Conservancy maintained endowment funds investments, and invested \$5,758,626 in new funds received through HCP fees received in 2022,
8. completed a major re-working of the Conservancy's web site to include improvements for accessibility, including for those challenged by typical web site presentations, but also for ease of use for HCP fee payers, government interests and general public as well as for transparency and the outreach facilities the web site increasingly provides,
9. the most severe drought in modern times plagued agriculture and marsh operations throughout the Central Valley of California in 2022. Using past investment in water production and conveyance facilities, combined with farm tenant cooperation and water agency collaboration, all managed marsh and Swainson's hawk uplands received 100% water allocation, even when water deliveries to the Sacramento River Settlement Contractors from the U.S. Bureau of Reclamation were at 18% of contract amount. Investment in groundwater well facilities, in institutional relationships and farm tenant cooperation paid off during this crisis,

10. over the years, the Conservancy has invested in technology which allows remote images of selected preserves. This has increased security, helped hold contractors accountable, reduced labor costs, and is seen as an experiment that portends additional positive results for Conservancy habitat land management,
11. nearly completed a comprehensive overhaul and update of the Conservancy's Site-Specific Management Plans (SSMPs); an earlier version was submitted for acceptance by State and federal Wildlife Agencies in 2021, but the major revision conducted in 2022 included the many new properties in recent years as well as changes to existing ones, and
12. managed the most rapid growth in nearly 20 years for the Conservancy, characterized by revenue in 2022 that exceeded the prior nine years of total revenue combined. This necessitated property integration into the HCPs, planning for conversion of additional managed marsh construction, additional staff, and farm lessees.

The Conservancy continues to conduct biological monitoring through contractor ICF Jones & Stokes, Inc. in cooperation with the U.S. Geological Service (USGS) and others, and certain of the habitat land care functions through Triangle Properties Inc., with Conservancy staff coordination and management. The work is occasionally supplemented by other specialists engaged to address questions or needs 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.

FIGURE 9

A beautiful specimen of a Swainson's hawk (*Buteo swainsonii*) forages above the prey production experimental plot in the Conservancy's North Basin Reserve Area. Year one of this demonstration project proved good enough for the Conservancy to extend the program for at least another year. (Conservancy staff photo on Conservancy mitigation land in 2022.)



FUTURE PLANS

During 2023, the Conservancy will continue maintenance and updating activity which will be focused primarily in the following areas:

1. incorporating the 2022 land acquisitions into the system of preserves,
2. there are numerous land transactions precipitated by action of the SAFCA whereby Conservancy properties are targeted for acquisition. There are five SAFCA-initiated property transactions that are presently in process. The actions are labor intensive and trigger additional work by the Conservancy, including that related to property taxes, revision of SSMP, amendment of biological monitoring contracts and implementation and other contract work necessitated by the land transactions,
3. complete a new revision of the SSMPs now that numerous additional properties have been acquired, then submit these to the State and federal Wildlife Agencies for approval,
4. while the Conservancy yielded benefit by its 2022 scrutiny and informal auditing of financial and accounting procedures, more is warranted. This includes, but is not limited to: an endowment funds deep dive, a specific HCP fee-paid audit, accounting software adequacy research, and internal financial controls that may be needed for a substantially expanded organization,
5. expand Swainson's hawk prey production initiatives. The Conservancy will plan for the expansion of additional prey production opportunities for the Swainson's hawk in an attempt to positively move the nest success metric,
6. initiate planning on managed marsh construction projects (design, engineering, permitting, bid packages, etc.). The intention is to have everything in place to begin construction in 2024, if approved,
7. field services: hire a field services supervisor to direct maintenance and management of expanded Conservancy property, and
8. prepare plans for the next conversion of rice fields to managed marsh so that if HCP fees come in as expected, the Conservancy will be prepared to immediately begin construction of the next managed marsh complex.

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



FIGURE 10
Native plants on Conservancy preserves in 2022. Clockwise; California fuchsia (*Epilobium canum*), Purple sage (*Salvia leucophylla*), Sticky monkey (*Mimulus aurantiacus*) and Button willow (*Cephalanthus occidentalis* var. *californicus*).

TABLE 4

THE NATOMAS BASIN CONSERVANCY
GENERAL RESERVE CHARACTERISTICS ILLUSTRATION, 2022 QUICK REFERENCE

Characteristic	County		Predominant Land Use			Water			Management Plan							Existing Trees				Other				
	Sacramento	Sutter	Rice	Upland	Marsh	NCMWC	Ground Water	Surface Water	SSMP	Marsh build '01	Marsh build '02	Marsh build '03	Marsh build '04	Marsh build '05	Marsh build '06	Marsh build '07	0	1-10	11-30	31+	Fenced	Livestock	Residence	Farm Buildings
Mitigation land tracts in order of acquired date																								
Silva		○																						
Betts		○																						
Kismat																								
Bennett North																								
Bennett South																								
Lucich North				○																				
Lucich South				○																				
Frazer North				○																				
Souza																								
Natomas Farms																								
Sills				○																				
Alleghany 50																								
Cummings																								
Atkinson			○		○																	○		
Ruby Ranch																								
Huffman West																								
Huffman East																								
Tufts																								
Rosa East																						○		
Rosa Central																						○		
Bolen North																								
Bolen South																								
Vestal																								
Bolen West																								
Nestor																								
Bianchi West																								
Elsie																								
Frazer South																								
Silva South																								
Richter																								P
Lauppe South			○																					P
Verona (e)																								P
Paulsen South																								P
Wiley																								P
Elverta																								P
Lauppe North																								P
Paulsen Central																								P

The color box represents inclusion of characteristic on that tract, the lighter color box with circle represents minor, partial or planned inclusion on the referenced track. p = Pending (e) = Conservation easement

23.04.27

FIGURE 11
BASE MAP OF CONSERVANCY PRESERVES AT DECEMBER 31, 2022

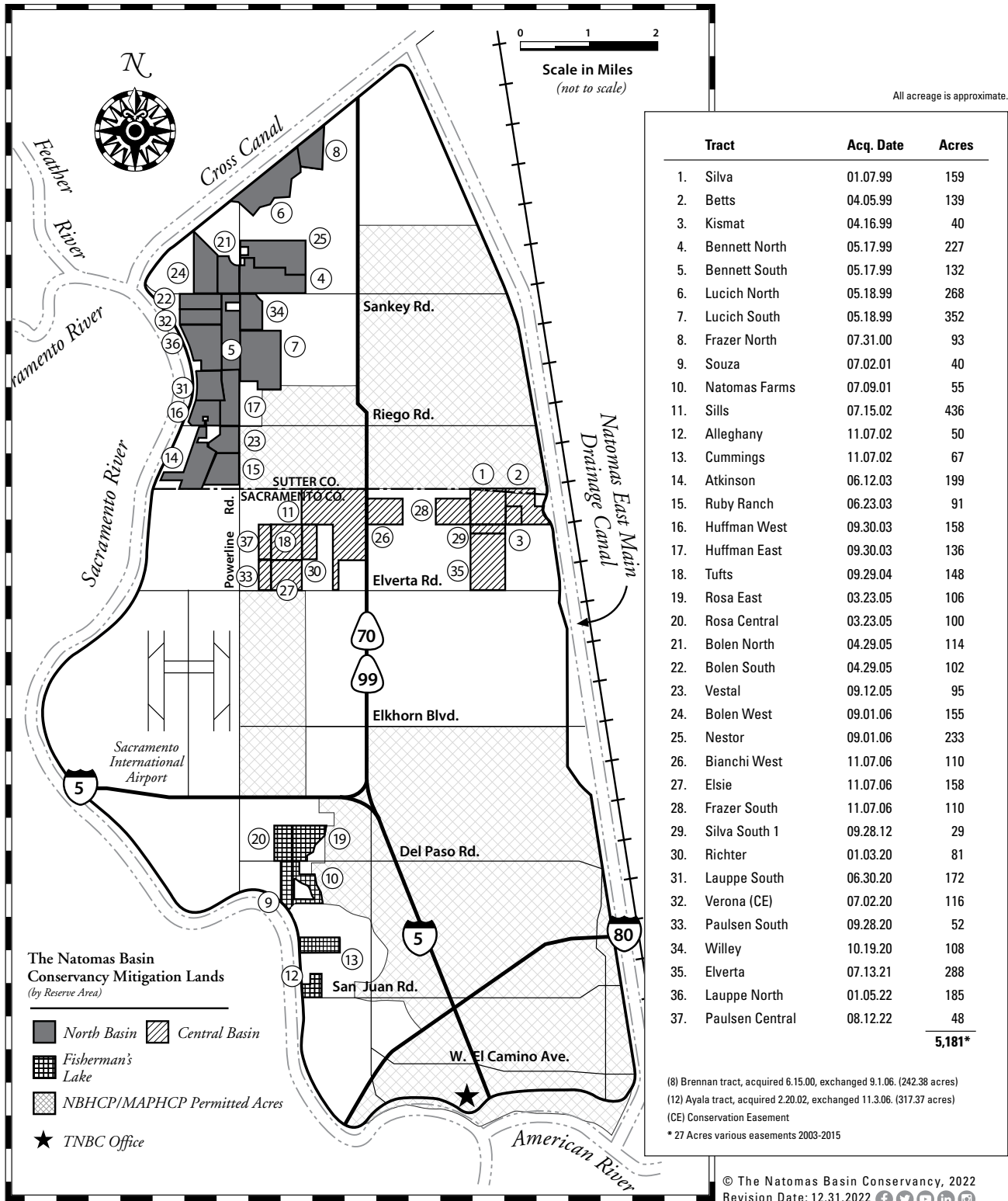


FIGURE 12
REVENUE VS EXPENSE | 10-YEAR REVIEW

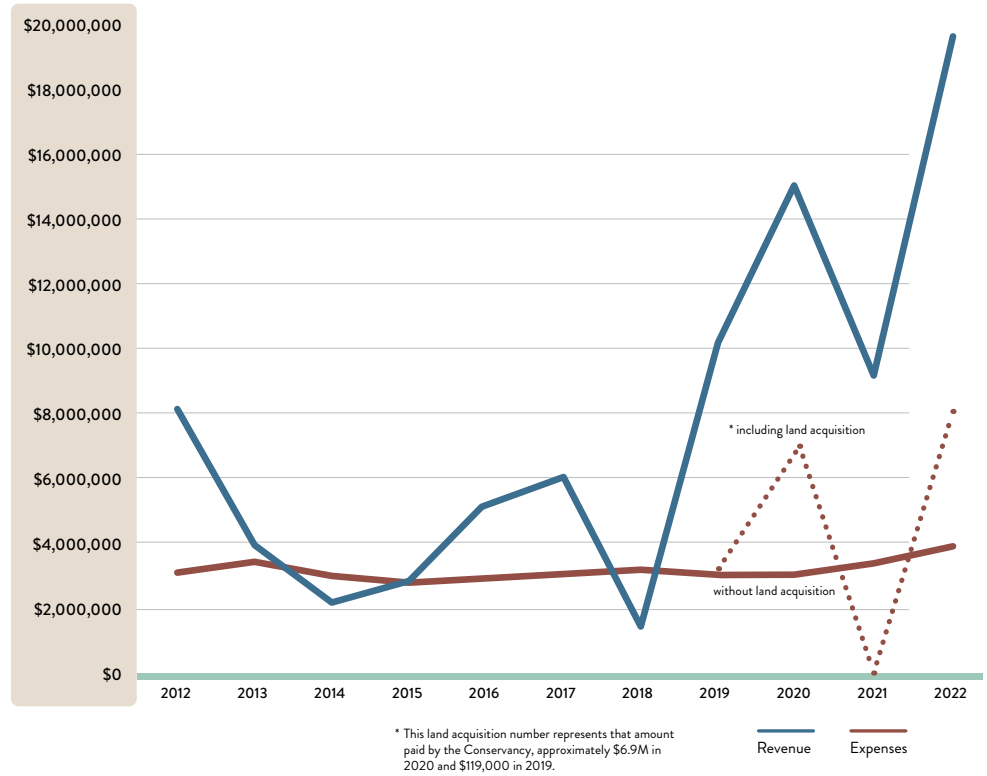
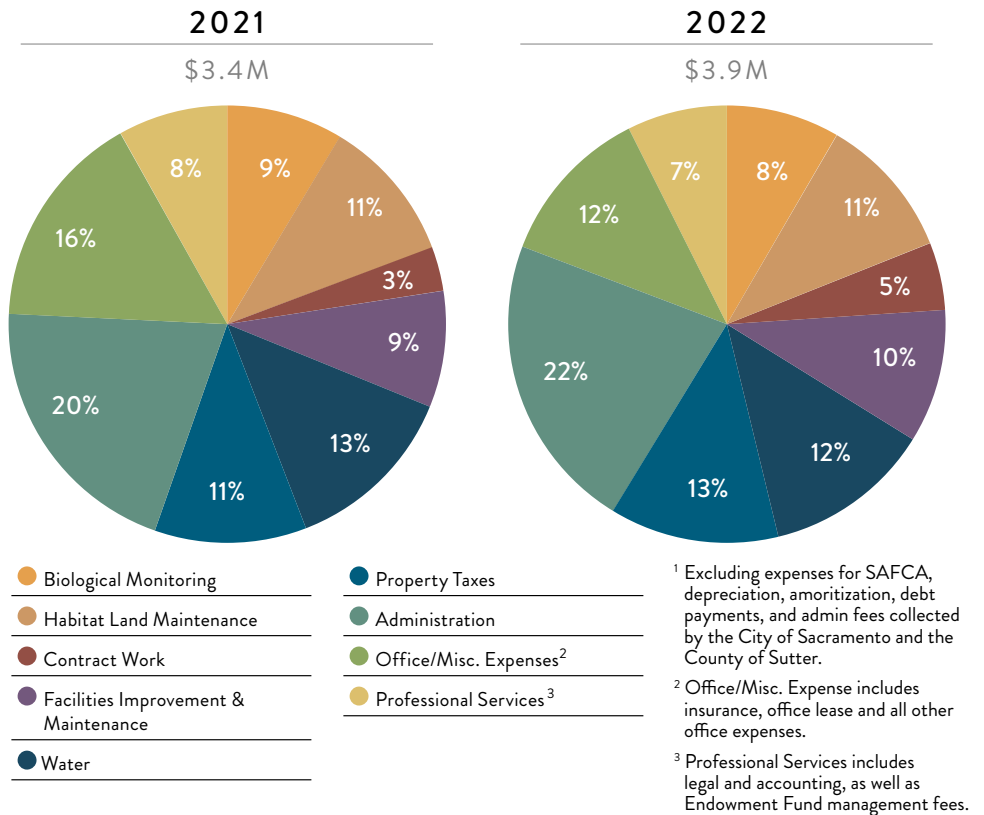


FIGURE 13
ADMINISTRATIVE EXPENDITURES ANALYSIS | 2022 VS 2021 BY CATEGORY¹



-
- ¹ A very small remainder is supplemental mitigation.
-
- ² The Conservancy is reporting City of Sacramento fee-paid acres as 6,872.23. However, a small difference exists between the Conservancy's and the City's numbers. The Conservancy and the City agree on this difference which is due to prepaid acres that have not yet been graded. See City of Sacramento's 2022 Annual Report of Urban Development for details.
-
- ³ "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."
-
- ⁴ All figures include the land value of in-lieu land dedication.
-
- ⁵ During 2013, the Conservancy worked to resolve Metro Air Park's approximately 23-acre deficiency in fees. See 2013 Annual Report for details.
-
- ⁶ There are numerous conditional adjustments to this surplus acreage number.
-
- ⁷ Easements account for 143.13 acres to the total, of which 116.55 acres are on the Verona tract.
-
- ⁸ 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.
-
- ⁹ 139.5 acres of the original 575.5559 acres of the Sills tract were exchanged for the two Rosa tracts on March 24, 2005.
-
- ¹⁰ SAFCA acquired portions of Atkinson (6.566 acres) and Huffman West (23.146 acres) for the Natomas Levee Improvement Project. Mitigation of those portions was shifted to Bolen West.
-
- ¹¹ Huffman West tract and 19 acres of the Huffman East tract is for supplemental mitigation required of Metro Air Park.
-
- ¹² Opus West mitigation (Promenade) 63.116 acres, Griffin Industries 42.005 acres, Brookfield (unused) 32.1075 acres, leaving a balance of 10.7215 available for future mitigation.
-
- ¹³ SAFCA acquired 0.111 acres of Bolen West for the Natomas Levee Improvement Project.
-
- ¹⁴ 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 14
Great horned owl (*Bubo virginianus*) perched atop a Conservancy sign. Photo taken by Conservancy staff on Conservancy preserves in 2022.



t h e
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