

Introduction and Purpose

This third annual report regarding Hansen Ranch Preserve is the first report that focuses on the general condition of the vernal pools and the entire preserve. This report is prepared for the Sacramento Area Flood Control Agency (SAFCA) in compliance with the terms of the Conservation, Monitoring and Management Plan (CMMP) developed in April 2001 for the property. The CMMP describes responsibilities of the Preserve Manager for detailed monitoring and management of the vernal pools and for general monitoring and management regarding the general condition of the Hansen Ranch Preserve.

In contrast with the first two annual reports this third annual report is brief. The first and second annual reports were comprehensive and provided descriptions of the background of the City of Sacramento's Hansen Ranch Preserve, its resources including the vernal pools. Monitoring results as well as other activities conducted under the Conservation, Monitoring, and Management Plan (CMMP) were included. Please consult the *Hansen Ranch Preserve Annual Monitoring Report December 2003* for further information regarding the CMMP; most recent vernal pool monitoring data and results; or other activities conducted in 2003.

2004 tasks include vernal pool assessments and management and tasks associated with the general condition of the property. Detailed vernal pool monitoring is not required in the third implementation year of the CMMP. The body of the report contains two sections. Representative photographs are also attached.

1. The first section provides qualitative information regarding the 3.1 acres of protected vernal pools, which in this year also contains a description of Sacramento Urban Streams Council Creek Week activities and the focused grazing that occurred in a portion of the pools north of the north levee; and
2. The second section contains descriptions of the general condition of the preserve and includes qualitative assessments of cattle operations, forage utilization, fencing, and preserve-wide debris cleanup. There is also discussion of noxious weeds and overall evaluation of resources.

1. 2004 Activities Related to Vernal Pools

Activities associated with the protected vernal pools included an overall vernal pool assessment, focused grazing of the pools north of the north levee, Creek Week cleanup of the vernal pool area south of the north levee, periodic cleanup of the vernal pools north of the north levee, and ensured that signage was intact and legible.

Qualitative Assessment of the Nine Vernal Pools

Inspections of the vernal pools occurred between February 6 and March 31, 2004, before grazing of the north area pools was conducted. Inspections included an assessment of inundation patterns and a general review of the native species in each pool known from previous monitoring sessions, notations of new or increasing species and field checks to determine their presence and approximate cover. Any particular or unusual feature or characteristic was also noted.

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| Pool 1 | Rye grasses (<i>Lolium sp.</i>) and grassy vegetation exhibited overall increased cover; fewer ten-horn downingia (<i>Downingia bicornuta</i>) and popcorn flowers (<i>Plagiobothrys humistrata</i>) than in previous year. |
| Pool 2 | Remained partially inundated for 6 days (condition not observed in previous years) with vegetation primarily exotic. |
| Pool 3/Pool 4 | These pools remained essentially the same as in previous years, with more ruderal vegetation, such as curly dock (<i>Rumex crispus</i>) in Pool 3. |
| Pool 5 | “In-pool” flowering less obvious, such as popcorn flower less showy but Fremont’s lasthenia (<i>Lasthenia fremontii</i>) nearby was spectacular in 2004. |
| Pool 6 | Littered with high flow debris, also scoured at west edge; less showy annuals overall than in previous year. |
| Pool 7 | Native plant content essentially the same (an <i>Eleocharis sp.</i> pool) but several Red Sesbania (<i>Sesbania punicea</i>) plants noted around perimeter. |
| Pool 8 | This pool is recovering well from mid-section vehicle tracks; pool has an improved vegetation signature, reflecting common spikerush establishment. |
| Pool 9 | Several more plants and plantlets of California arrowhead (<i>Sagittaria montevidensis</i>) and sedges were noted this year along with the prevalent rye grass and weedy species. |

Each year is different in terms of native plants observed and overall vegetative cover, dependent upon temperature, precipitation, and browsing, and conditions of previous years. Vegetative cover was abundant early in 2004, and for the ungrazed pools resulted in dense grasses and forbs. The high flows of late December 2003 and early January account for the debris deposits in swales and vernal pools south of the north levee.

Summary of Grazing Activities/Comments for the North Area Vernal Pools

1. Obtained permission from USFWS (September 21, 2003);
2. Installed a water trough and negotiated an agreement for water from the neighbor adjacent to the northwest corner of the preserve;
3. Monitored the phenology of the grasses, particularly the *Bromus diandrus* and other annuals and determined that the onset of flowering was early in 2004 (late February and March);

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4. Developed a grazing schedule with Cub Coyle which was 10 days/20 head in Unit 1 and 14 days/12 head in Unit 3;
5. Cattle were removed when VP 1 and VP 9 had obvious hoof punching;
6. There was some concern that the cattle were not left in long enough but we sought a cautious approach in the first year.
7. Cattle were attracted to the burned portion in the southwest quadrant of Unit 1 where filaree (*Erodium botrys*) was abundant as a post-fire dominant species.
8. There was no depredation of the seven cage-protected young trees in Unit 1.

Vernal Pool Maintenance Activities

1. Creek Week Cleanup at Hansen Ranch April 17, 2004 was successful and quite popular with the returning families and friends from EDAW. The cleanup activities focused on debris removal from VP 6 and the adjacent drift line.
2. Kimball Neely performed periodic cleanup of the vernal pools north of north levee;
3. Inspected the 2003 installed signage stating property is managed as a preserve to protect sensitive species and their habitats. One sign remains bent, but is legible.

2. Hansen Ranch General Condition

Once the focused grazing of the vernal pools north of the north levee was completed, activities focused on assessing the general condition of the preserve and on debris removal from Unit 4.

Range Condition

Range condition assessments included qualitative assessments of forage condition and availability, cattle usage patterns, and soil stability. Due to the ample early precipitation and overall warm conditions in winter and early spring, there was abundant annual vegetation on the preserve. Coyle had reduced the size of his herd in fall 2003, with the resident herd number of 68 head in 2004. Because the feed supply was abundant he acquired ten "lease" cattle which now remain at Hansen Ranch.

Various inspections of the range condition through mid-September indicated there were no areas where the total residual dry matter mass was less than 750 pounds to the acre, except at a salt block loafing area and under a few large oak trees. The majority of the pasture contained over 1,000 pounds to the acre which means the vegetative cover essentially shields the soil. In areas where the residual dry matter is over 1,000 pounds to the acre, seed stalks are visible and not all forage is utilized.

The cover diversity was as anticipated, with a preponderance of annual rye grass (*L.multiflorum*) in the wetter areas and mixtures of bromes and fescues in the dryer locations. Star thistle (*Centaurea solstitialis*) was observed at locations where cattle travel frequently, such as the Dry Creek cattle crossing and the entry point from the Coyle Ranch. Star thistle was also noted in the area north of Dry Creek on the west

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boundary of the preserve and in Unit 3. Milk thistle (*Silybum marianum*) also exists in the center of Unit 4 and along the fence line in Unit 3.

A discussion topic for 2005 is weed control in upland areas, away from vernal swales and pools. Under present grazing conditions of free access to the large Unit 4, grazing to control what appear to be increasing weed species is not realistic. Hand-rouging of milk thistle plants while young may be an acceptable first approach; however, targeted chemical controls may be more realistic for both milk thistle and star thistle.

In the ungrazed Unit 5, Bermuda grass (*Cynodon dactylon*), chicory (*Cichorium intybus*), horseweed (*Conyza sp.*) along with moisture loving smartweeds (*Polygonum sp.*), bearded sprangletop (*Leptochloa uninerva*), barnyard grasses (*Echinochloa sp.*), as examples, grew unabated. The water levels of Robla Creek increased as beaver populations downstream of Hansen Ranch and in Steelhead Creek were thought to be increasing. The wet conditions supported the dominant pond weed water primrose (*Ludwigia peploides* ssp. *montivedensis*). These conditions also appear to be affecting several large valley oak (*Quercus lobata*) trees and at least three have died over a two year period. Others may be affected in the future.

In early autumn, it appeared that the Dry Creek Watershed Red Sesbania Control Program contractor would schedule time at the preserve where red sesbania (*Sesbania punicea*) populations have lodged along the creek banks and within the channel. Unfortunately, the contractor was unable to meet its goal and did not perform work at the preserve. Removal activities are planned for 2005.

Fencing

SAFCA and Coyle entered into a formal pasture lease agreement as of April 23, 2004. Included in the agreement is a provision whereby the lessee and the Preserve Manager inspect the condition of the fencing three times per year. This activity brought on a continuing discussion among SAFCA, the Preserve Manager, and Coyle. Specifically addressed was completion of the Dry Creek crossing at the west boundary; fencing of the boundary between Hansen Ranch and SAFCA's Whitley property (an estimated 400 linear feet) and a cross fence across Robla Creek.

While the intention has been to perform these tasks, the work was not implemented. The immediate consequences are that Coyle is hesitant to place cattle in Unit 5 because the east border is unrestricted and due to the lack of grazing, the vegetation grew unchecked. Coyle has concerns about the lack of cross fencing on Dry Creek because there is the potential that the cattle could stray through the channel. Also, when the flows are high, calves could potentially lose footing and float away.

Debris Cleanup

As in 2003, the Rio Linda Elverta Parks and Recreation District in conjunction with the Sacramento Conservation Corps spent several days picking up debris and removing large pieces of lumber and tree wood, tires, and household articles. The crew also partially removed sections of a dilapidated wire fence. The work was performed between September 27 and October 5, 2004. Kimball Neely staff and Coyle also performed debris removal and completed removal of the wire fencing in November. Both efforts yielded several truck loads of refuse.

Due to the preserve's location situated in the low end of the watershed, debris deposits are anticipated annually. April and September 2005 activities will include debris removal tasks.

Related Activities

- Planning for City of Sacramento Ueda Parkway Trail is underway. A contract has been signed with a consulting firm to complete survey work along the trail alignment and to complete a final set of construction documents. This work should be completed by year-end 2005. In addition, CEQA documentation has been approved by the Sacramento City Council; and finally, the City is working in cooperation with the National Park Service to develop an Operation and Maintenance Plan for the Ueda Parkway.
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- Hansen Ranch was included in a Dry Creek raptor survey performed in August 2004. A nest of white tailed kite (*Elanus leucurus*) was observed in the vicinity of the west boundary of the preserve at Dry Creek and the nest of a red tail hawk (*Buteo jamaicensis*) was observed in an oak tree in the southeast corner of the preserve.
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- Access to Hansen Ranch through Coyle Ranch was created by placing a drop gate in the boundary fence between the Coyle Ranch and SAFCA's Carmical property. The gate is to be used only for Hansen Ranch improvement activities and emergency access. There is no formal agreement with Coyle to access through his property.
- Parties interested in the Hansen Ranch Preserve met for a field review July 9th and on August 23rd the preserve was a stop-point for the North Area Round Table site review.

Conclusion

There were numerous accomplishments in 2004. The new pasture lease, the focused grazing to reduce biomass in the northern sets of vernal pools, an energetic Creek Week crew and the long hours of debris cleanup are a few examples of the continuing efforts to improve the conditions of Hansen Ranch. Yet there is work to be done on this biological preserve with cattle –a preserve that is also affected by storm events, activities and management practices upstream and downstream. 2005 promises to be a continuation of our previous commitments and plans and new efforts as they arise.

2004 HANSEN RANCH PHOTOS



Pool 2 partially inundated.
March 11, 2004



White egrets feeding at Pool 1.
April 1, 2004



Water trough installed at Unit 1.
April 1, 2004



Pool 2 after one week of grazing.
April 9, 2004

2004 HANSEN RANCH PHOTOS



Robla Creek in Unit 5 with
dominant water primrose.
May 26, 2004



Fence line comparison of biomass
in Unit 4 (left) and Unit 5 (right).
August 13, 2004



Invasive red sesbania and dead
valley oak in Unit 5.
August 13, 2004



Debris removed by Sacramento
Conservation Corps.
October 4, 2004