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October 6, 2014

Meta Loftsgaarden, Executive Director  
Oregon Watershed Enhancement Board  
775 Summer St. NE, suite 360  
Salem, OR 97301-1290

Dear Ms. Loftsgaarden:

The attached proposal comes from the High Desert Partnership on behalf of the Harney Basin Wetlands Initiative. This group has been working to find collaborative approaches to improve Malheur Lake and manage the flood irrigated meadows of the Harney Basin floodplain for the last few years. We operate on the basis of trust relationships built through collaborative processes. We have made significant progress in honing our approach and priorities. We believe that the people of Harney County and the continental significance of the wetlands of the Harney Basin would be an ideal place for a focused investment.

- The Harney Basin wetlands are of continental importance for migratory waterbirds and are a state significant conservation area.
- The partners are making significant strides to address the critical limiting factors affecting the ecological conditions of Malheur Lake.
- The community strongly supports the efforts to maintain and make efficient the flood irrigated pasture and haylands within the Harney Basin.
- The partners are poised to ensure state funds are strongly matched to accomplish significant ecological improvement to the linked priorities of improving Malheur Lake and the associated wetlands of the Harney basin.

The partners would be pleased to provide additional information or make a presentation to the OWEB Board if that would help your selection process. Thank you for the opportunity to propose this unique area and partnership for your consideration as a Focal Investment Priority.

Sincerely,

A handwritten signature in black ink that reads "Gary S. Marshall". The signature is written in a cursive, flowing style.

Mr. Gary Marshall, Chair  
High Desert Partnership

# Harney Basin Wetlands

## Proposed Focused Investment Priority Area

*"We are intimately connected to nature, and nature is intimately connected to us. Malheur's history reveals the tangled intimacies of human dreams and labors written upon the landscape, the messy connections between water and land and between human and natural."* Nancy Langston (2003)

### Summary

The Harney Basin Wetland Initiative represents an outstanding candidate for designation as a Focal Investment Priority by OWEB for four reasons. First, Harney Basin's wetlands which occur both on the Malheur National Wildlife Refuge and on surrounding privately owned ranchlands are well established as among the most important wetland complexes in North America for migratory birds. Second, this ecosystem is highly imperiled and on the verge of collapse due to invasive common carp which have severely reduced the productivity of the refuge's largest wetlands and by conversion of agricultural fields from flood to sprinkler irrigation. Third, an unprecedented coalition of ranchers, conservation organizations, tribes, local, state and federal agencies, technical experts and others has been working together for more than five years and has produced a collaborative vision and strategy for addressing these challenges. Finally, and most importantly, with sufficient funding, these challenges can and will be addressed in a way which restores ecological health to the basin while also supporting the ranching economy. The designation of the Harney Basin Wetlands as a Focal Investment Priority is an unprecedented opportunity to invest in the resiliency of the ranching community and the wetlands of the Harney Basin.

#### 1. Priority Description: Harney Basin Wetlands

Recognized as one of the 43 most important places on the North American continent for migratory birds in the North American Waterfowl Management Plan Revision of 2012, the Harney Basin Wetlands are the northern anchor of a string of wetlands that extends across the Southern Oregon/Northeast California (SONEC) region. This area is one of a small number of opportunities to focus management of wetland ecosystems to maintain resilient populations of waterfowl, shorebirds and other waterbirds in the Pacific Flyway. The Harney Basin wetlands include the Malheur National Wildlife Refuge (MNWR) and managed wetland/pastures associated with the lower Silvies and Blitzen Rivers and McCoy and Silver Creeks. More than 320 species of birds can be found on MNWR, an Audubon-designated "Globally Important Bird Area," and surrounding private lands.

The Harney Basin Wetlands is an area that includes a series of shallow lakes and managed wetland/pastures along the floodplains of tributaries to the lakes. This is an area of continental significance for waterfowl, serving as a major fall and spring staging area during migration (North American Waterfowl Management Plan Committee 2012, Fleskes and Yee 2007). During southward migration in the fall, ducks, geese, shorebirds, and wading birds rely on the wetlands to feed and rest before continuing on to their primary wintering areas in California and Mexico. This pattern is reversed in the spring and many of the same birds pass through the region on their northward migration to the Canadian prairies and Alaska. During spring migration, more than five million ducks, a million geese and 100,000 swans pass through the Harney Basin Wetlands, stopping to feed and gather strength for the long journey to their northern breeding grounds. As a spring staging area, the Harney Basin Wetlands play a critical role in the lifecycle of Pacific Flyway waterfowl. Some of the notable spring migrants through the region include 33% of the continental population of Northern Pintails, over 80% of the western population of Tundra Swans, and over 50% of the Pacific Flyway's Greater White-Fronted Geese (Fleskes and Yee 2007). Habitat conditions in the Harney Basin can influence breeding performance in other regions of North America.

The Harney Basin also has significant value for native fish. The Donner und Blitzen River, originating on the slopes of Steens Mountain, provides a stronghold for Great Basin redband trout, a sensitive species in Oregon. Redband trout that migrate back and forth between mountain streams and the food-rich wetlands in and around Malheur Lake grow to impressive sizes and “represent one of the few intact migratory populations of redband trout in Oregon’s Great Basin region” (Anderson 2007, Anderson 2009, Anderson et al. 2009). Although relatively intact when compared with much of the state, the ecological values of this anchor of Oregon’s biodiversity are increasingly at risk. The Nature Conservancy’s recent analysis of “the most resilient sites in the Northwest that will collectively and individually best sustain native biodiversity even as the changing climate alters current distribution patterns” identifies Malheur Lake and associated managed wetland/pastures as one of the portfolio sites that can contribute to conservation on a regional scale (Buttrick, et al., 2014).

Malheur Lake, the biological heart of MNWR and the largest freshwater marsh in the West, is sliding toward ecological collapse, victim of an exploding population of non-native common carp (*Cyprinus carpio*). Introduced decades ago, these destructive invaders have decimated the lake’s natural marshes, uprooting vegetation and creating a vast murky expanse of open water where hundreds of thousands of breeding waterbirds formerly found abundant food and cover. A lake that once annually produced more than 100,000 ducks and geese, and sustained peaks of more than half a million migrating waterfowl now supports less than 10% of those historic numbers.

On the managed wetland/pasture around Malheur Lake, public and private lands still host hundreds of thousands of waterbirds every spring. Traditional flood irrigation (which mimics historic natural flood events), and annual haying and grazing create ideal spring conditions for migratory waterbirds on the Blitzen, and Silvies Rivers, and Silver and McCoy Creeks floodplain. Floodwaters from melting snowpack in the surrounding mountains are diverted onto fields and pastures, creating shallow ponding among short grasses with an abundance of seeds and invertebrates for waterbirds to feed on. Peak numbers of more than 300,000 snow geese join sandhill cranes, northern pintail, white-faced ibis and other birds in foraging across the Harney Basin’s floodplains. But this rich area is also at risk. Pressure is mounting for development and conversion to more efficient irrigation poses a threat to these critical seasonal wetlands.

### **Malheur Lake**

The state’s comprehensive wildlife conservation plan, the Oregon Conservation Strategy (ODFW 2006) identifies Malheur Lake as a priority area for conservation investments. Designated as Conservation Opportunity Area NBR – 08 (Harney-Malheur Area), this area is described in the plan as having some of most important wetland habitats in the west:

Biological Significance	Key Habitats (from Oregon Conservation Strategy)	Key Species (from Oregon Conservation Strategy)
4,000 breeding white pelican	Riparian Habitats  Wetlands	American White Pelican
Area has a high diversity of breeding waterbirds, including the largest population of nesting sandhill cranes in Oregon.		Franklin's Gull
Highest number of greater sandhill cranes (90% Lesser Sandhill Crane (migration))		Sandhill Crane
20% World population white-faced Ibises		Black-necked Stilt
heavy use by migrating waterfowl (hundreds of thousands migrating waterfowl) and other waterbirds.		Snowy Egret
7,000 breeding western and Clark's grebes		Swainson's Hawk
20,000 migrating shorebirds		Ferruginous Hawk
Half of the world's Ross's geese		
Hundreds of thousands of shorebirds		
1.8 million ducks, geese and swans		

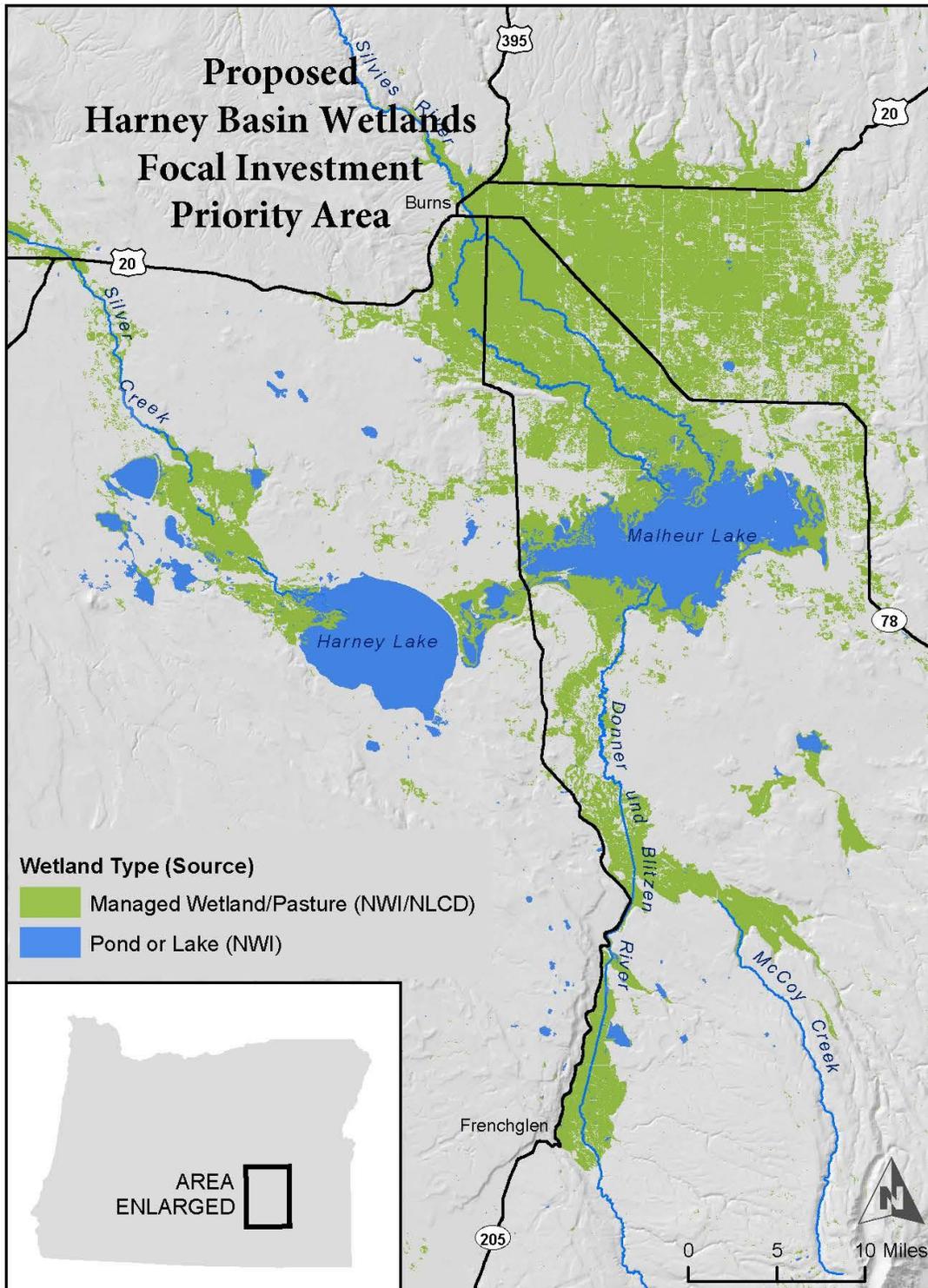
### Managed Wetland/Pastures

The managed wetland/pastures associated with the Donner und Blitzen River, McCoy Creek, Silver Creek and Silvies River are a critical part of the habitats that support the immense flocks of migratory waterfowl and other waterbirds. The Silvies River Floodplain is identified in the Oregon Conservation Strategy as Conservation Opportunity NGB – 07 and is characterized as:

Biological Significance	Key Habitats (from Oregon Conservation Strategy)	Key Species (from Oregon Conservation Strategy)
Seasonal wetlands maintained by flood irrigation and managed for hay production and livestock grazing provide high quality habitats for migrating waterfowl and other waterbirds, especially in spring.	Aquatic Riparian Wetlands	Black-necked Stilt
Floodplain habitats support significant numbers of nesting sandhill cranes and other waterbirds.		Franklin's Gull Sandhill Crane Oregon Great Basin Redband Trout Western Snowy Plover

The wetlands associated with the lower Donner und Blitzen River are very similar to those of the other river floodplains and present similar management options, although they are dominantly managed by MNWR. In addition to the waterfowl and waterbirds, the Donner und Blitzen River provides a stronghold for Great Basin redband trout, a sensitive species in Oregon.

Recent research (Sage Grouse Initiative, 2014) has shown wetlands in sage country are critical as foraging habitat for growing sage grouse broods. The conservation of managed wetland/pastures will provide a benefit to adjacent arid species such as sage grouse.



Extent of wetlands in the Harney Basin, Oregon. Produced in the U.S. Fish and Wildlife Division of Realty and Refuge Information, Portland, OR. 9/17/2014. File 14-131-2.MXD.

## 1. Risk/Opportunity

### Malheur Lake Threats

Habitat for waterbirds and other native fish and wildlife and water quality are threatened by the hyper-abundance of common carp (*Cyprinus carpio*). The disruption of sediment by carp during their benthic feeding has eliminated submerged vegetation and significantly reduced the habitat and food available for migratory and resident waterfowl and waterbirds. If carp numbers are not reduced, the role of the National Wildlife Refuge for maintaining the waterfowl and waterbird populations of the Pacific Flyway will be significantly compromised. While Malheur Lake and surrounding managed wetland/pastures support nearly 35% of the Pacific Flyway population of Northern pintail, the continental population is declining. Improvement of marsh habitats will have the opportunity to increase the population supported in the Harney basin.

The focus on reducing the carp population is emphasized in the U.S. Fish and Wildlife Service's 15-year Comprehensive Conservation Plan for MNWR, adopted in 2013. If the carp population is not addressed, the refuge's ability to maintain waterfowl and waterbird populations will continue to decline resulting in greater reliance on private lands for waterfowl and waterbird production.

### Managed Wetland/Pastures Threats

The waterfowl and waterbird populations that migrate along the Pacific Flyway depend on flooded pastures and meadows for forage, resting, and nesting habitat. Conversion of these agricultural fields to sprinkler irrigation can have a significant deleterious effect on food production and nesting habitat for thousands of migratory birds. The current work in the Harney Basin to build a stronger understanding of the relationships between water table and vegetation composition and the effects of changes in flood duration and ground water elevation will help both public and private land managers as they struggle with the balance between providing waterbird habitat and producing nutritious forage for livestock. A major effort to develop state and transition models to be used in building understanding and consistent management of these seasonally flooded systems has been initiated by MNWR and its partners in the Harney Basin Wetlands Initiative and holds promise for more effective and consistent management of both irrigation waters and waterbird habitats.

### Risk of Failure

The management of grazing using state and transition models is an effective technique in rangeland management. Recent reviews (Bestelmeyer et al., 2010, and Knapp, 2011) have shown the technique to provide a strong link between understanding vegetation change processes and grazing management. The development of state and transition models and application to managing the wet meadows of the Harney basin has a low risk of failure. Maintaining a strong partnership between the ranching community and the MNWR is important for consistent use of the models for managing flood irrigated meadows.

Elimination of carp using rotenone has proven ineffective. Previous attempts to eliminate carp by the application of the piscicide rotenone have only had a short duration effect (Ivey et al., 1998). Building an understanding of the population dynamics and behavior of carp in Malheur Lake and tributary streams will allow more directed approaches to manage the population through a variety of interventions. With the significant uncertainty about the effectiveness of carp management, the monitoring program to track the carp

population and Malheur Lake conditions has increased importance. Recent commitments for use of carp as organic fertilizer for locally produced forage is a promising start to effective reduction of the carp population.

### **Partnerships to Address the Issues**

Significant community organization and scientific evaluation have been conducted as well as substantial investment in fish passage and screening on the lower Donner und Blitzen River. To date, the parties interested in the basin have organized as the Harney Basin Wetlands Initiative, an initiative of the High Desert Partnership (Attachment A), to assure coordination of efforts and improve effective communication among the public and private interests in the basin. Three work groups have been organized to implement the MNWR Comprehensive Conservation Plan (CCP). These work groups; Ecology Work Group, Malheur Lake Work Group, and Wildlife Work Group each focus on different aspects of the management issues required to address the ecology of Malheur Lake and associated managed wetland/pasture habitats. The work groups are co-led by MNWR staff and other “third party members” who have knowledge or skills to help the group solve issues. These three groups have been active and have prioritized lake management needs (Lake Group), managed wetland/pasture systems (Ecology Work Group) and monitoring protocols (Wildlife Group). Other funding has allowed significant progress on each front.

The Malheur Lake Work Group has obtained funding for an initial carp population evaluation and commercial use feasibility analysis. The Ecology Work Group has conducted a detailed vegetation inventory and is developing state and transition models for the flood irrigated systems. They have developed a set of vegetation and shallow groundwater monitoring wells to relate water table depth and change to vegetation patterns to improve the state and transition models. The Wildlife Work Group has prioritized monitoring needs and have drafted and field tested priority monitoring protocols. A landowner work group is developing conservation strategies for managed wetland/pastures outside the refuge and several partners (NRCS, Intermountain West Joint Venture, Ducks Unlimited and MNWR) have pooled funding to hire a wildlife biologist to help implement projects on private lands.

The MNWR has invested nearly \$10 million in fish passage and screening along the lower Donner und Blitzen River. The lowest diversion (Sodhouse Dam) was retrofitted with a fish trap to intercept carp moving into the river. During a short period in the summer of 2013 more than 33,000 carp were removed from the river. The Harney County Local Working Group that advises local conservation priorities for the Natural Resources Conservation Service (NRCS) has identified carp management as a priority local conservation implementation strategy (Harney Basin Aquatic Health Improvement). In 2014 the group also identified Working Lands for Waterbird Conservation as a priority Conservation Implementation Strategy and NRCS expects to commit funding to several initial projects in 2015. The initiatives and the identified necessary work involve building a better understanding of water movement in the Harney Basin to help working land managers address irrigation and waterbird needs. Eliminating fish passage barriers and screening diversions to prevent carp reintroduction to Malheur Lake are high priorities for future actions.

Failure to continue the improvements to Malheur Lake and managed wetland/pasture systems of the Harney Basin will jeopardize spring migration, breeding and production habitat for Pacific Flyway waterbirds and imperil the nation’s population of northern pintail, white fronted geese and other waterbirds.

The North American Waterfowl Management Plan (NAWMP Plan Committee, 2012) has a specific recommendation to “Focus resources on important landscapes that have the greatest influence on waterfowl populations and those who hunt and view waterfowl.” The SONEC region which includes the Harney Basin wetlands is one of the 43 areas for focus in the North American continent. The Intermountain West Joint Venture has taken up the challenge of the NAWMP and identified the SONEC wetlands, with a specific emphasis on the Harney Basin as a one of its top priorities for regional bird habitat conservation and is taking the lead on coordinating efforts to conserve spring migration habitats on private lands.

The 2014 Farm Bill provides an exciting new opportunity to bring additional financial resources to the Harney Basin. The Intermountain West Joint Venture is working with non-federal funding partners on a 5-year Regional Conservation Partnership Program (RCPP) proposal. If approved, this robust partnership would leverage \$5.5 Million in Federal NRCS dollars with \$7.4 Million in matching federal and non-federal funds to focus conservation activities on aquatic habitats across Southern Oregon. Conservation easements, fish passage and screening, and flood-irrigated wet meadow enhancements would be the priorities under this initiative.

## **2. Significance to the State and Benefits**

Building on existing collaborative efforts, there is a significant window of opportunity for accelerated action to advance ecological opportunities along with economic benefits in the Harney Basin. The MNWR is a critical recreational resource for Harney County. More than 65,000 annual visitor days have been documented by the MNWR (MNWR, 2013). Visitors to MNWR add to the tourist economy of Harney County. In addition to the recreational and hunting uses of the refuge, refuge lands are grazed by local ranchers under lease agreement with the MNWR. The managed wetland/pastures of the Donner und Blitzen and the private lands of the Silvies floodplain are important for cattle grazing and haying. Agriculture is the largest economic sector in Harney County. Conservation investments in these working lands will contribute to the long-term viability of local agricultural operations while generating ecological benefits with continental significance for migratory birds.

Beyond the economic value of the lands and resources involved, the current cooperative approach between the MNWR, its partnership in the Harney Basin Wetlands Initiative and the community to build understanding and integrate ecological solutions in the cultural and economic life of Harney County has significant value. There has not been a long history of cooperative relationships between the local ranching community and the MNWR. The collaboration developed through the High Desert Partnership that was reflected in the development of the MNWR CCP has made a new approach possible.

Aligned with the social and economic benefits of this partnership are the regionally and nationally significant ecological resources at stake. The waterfowl and waterbird benefits from effective management of carp in Malheur Lake and cooperative management of flood irrigated pastures of the Silvies and Blitzen floodplains go beyond the borders of Oregon. Of worldwide significance, the area supports 20% of the world population white-faced Ibises and half of the world’s Ross’s geese. Of regional significance, the area supports 1.8 million ducks, geese and swans, hundreds of thousands of shorebirds, and 90% Lesser Sandhill Crane (migration) in the Pacific Flyway. The Harney Basin represents a significant portion of the complex of SONEC wetlands that comprise the last stronghold for spring migrating waterfowl and other waterbirds of western North America.

### **3. Likelihood of Addressing the Priority**

There could be no better time to take on this restoration priority than the current time. The foundation has been laid by the development of common interests and partnerships that have not existed in the past. The science and policy underpinnings have been brought together. Community support to actively address the common interest in a healthy Malheur Lake and flood irrigated wet meadows and pastures is strong.

The organization of the High Desert Partnership and the hard work of bringing the community together around the cooperative development of a Conservation Plan for MNWR laid the foundations for the Harney Basin Wetlands Initiative and have paid dividends in building understanding and cooperation around two common purposes, managing carp in Malheur Lake and managing flood irrigated meadows and pastures for mutual waterbird and economic benefits. The partnership and its accomplishments are highlighted in the newsletter of the Intermountain West Joint Venture newsletter (see <http://iwjv.org/news/harney-basin-revival-role-carp-wrangling-and-consensus-building#%20>).

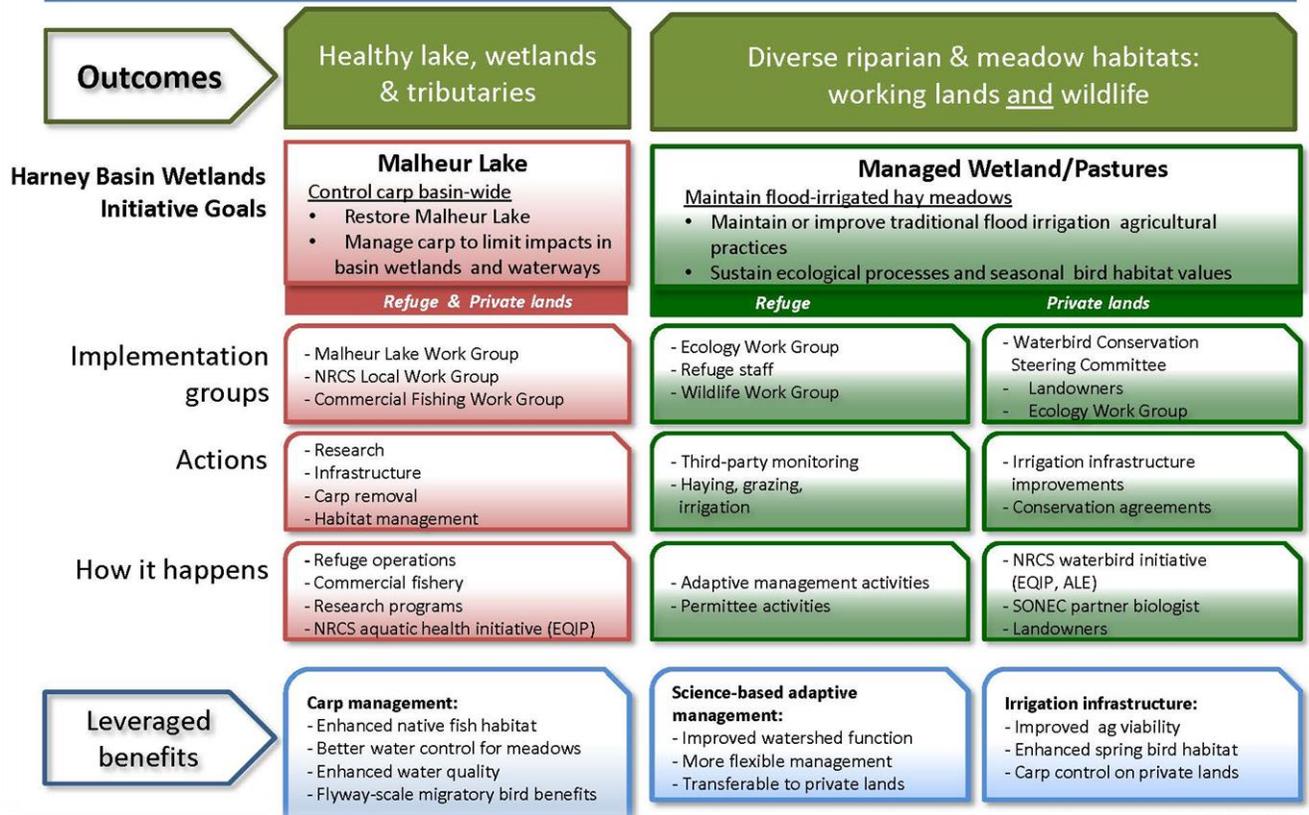
As a demonstration of the cooperative effort, the NRCS has identified two Conservation Implementation Strategies for Harney County, Harney Basin Aquatic Health Improvement focuses on carp management and Working Lands for Waterbird Conservation focus on the managed wetland/pastures. NRCS is also considering Regional Conservation Partnership Program for the Harney Basin. This focus of USDA program funds, such as RCPP, to assist in the accomplishment of a common effort is a clear sign of the support from the community for the focused priority.

Success of the improved management of wet meadow systems is quite likely. The utility of state and transition models for range management has a strong history and body of practical experience. Management of carp in Malheur Lake is a difficult undertaking. Previous experience with efforts to eliminate carp by rotenone treatment has not been successful in the long term. The current effort to manage carp populations by trapping and netting adult carp has worked in other areas but requires a long-term commitment. To be effective, carp experts say control will require targeting of carp at all stages of their life history. The results of carp management will be evaluated by remote sensing of levels of chlorophyll a and submerged and emergent vegetation. These response variables will also be cross checked with waterbird use monitoring. Significant increases in submerged vegetation and waterfowl and other waterbird use of Malheur Lake will indicate successful outcomes for the control of carp populations. The significance of the restoration effort is great. The recovery of waterfowl and waterbird habitat to Malheur Lake is critical to retain the populations of the Pacific flyway.

The broad range of support to address the issues affecting Malheur Lake and the flood irrigated wet meadows and marshes of the Harney Basin is unprecedented and the cooperative approach has been recognized with the commitment of both public and private funding to initiate efforts to address the issues. The following is the conceptual framework for the initiative.

# Harney Basin Wetlands Initiative

Advancing collaboration for community and ecosystem resilience and adaptability



October 2014

## 4. Science (Identifying ways to recover listed species, habitats at risk)

A science workshop was held in March of 2010 to identify the ecological conditions related to carp abundance in Malheur Lake. A second Aquatic Health Workshop was held on March 13-14, 2012 to discuss what had been learned and what management actions had taken place in the Lake. Sixty participants over two days talked of what has happened since the March 2010 carp workshop and what direction the MNWR will take in the future.

The Comprehensive Conservation Plan for MNWR calls for three work groups to address the science guiding management of Malheur Lake and the flood irrigated meadows of the lower Donner und Blitzen floodplain. The Malheur Lake Work Group has developed a summary of the science underpinning the ecology of Malheur Lake and the information necessary to guide management. The Ecology Work group has completed a vegetation survey of the Blitzen valley and is developing state and transition models for the managed wetland/pastures of the area. The Wildlife Work Group has developed and prioritized monitoring protocols to assure that management actions are evaluated using the best available information.

A concerted effort is being made to apply adaptive management to the reduction of carp in Malheur Lake and managing flood irrigated wet meadows and pastures of the Harney Basin. Monitoring indicators of change in

the lake is a critical element of the restoration approach. Use of state and transition models and continued gathering of data on the relationship between surficial hydrology and vegetation will build the understanding necessary to guide management choices.

Other natural resource organizations have also made significant science investments in the Harney Basin. The IWJV is working to provide the tools to explicitly measure and evaluate biological outcomes via species-habitat carrying capacity models that address limiting factors for waterfowl during spring migration. They are also working to develop decision support systems that will target limited conservation program resources and maximize biological benefits. The Portland Audubon Society is funding interns to apply the monitoring protocols developed by the Wildlife Work Group.

## **5. Social Structure**

There has been a long history of recognition of the importance of the Harney Basin wetlands for waterbirds. Nearly all regional or statewide planning and ecological site recognition reviews have identified the Harney Basin wetlands as priority conservation areas. These conservation planning initiatives will help guide conservation delivery activities in the landscape. The Harney Basin wetlands are identified as ecologically important by the following planning efforts:

- Oregon Conservation Strategy (Conservation Opportunity Areas NGB-07 and NBG-08),
- Eastern Oregon Bird Conservation Plan,
- Interior Columbia Basin Ecosystem Management Project,
- Oregon Biodiversity Project Conservation Opportunity Areas (Steens Mountain),
- Oregon's Important Bird Areas,
- The Nature Conservancy Ecoregional Assessment,
- Intermountain West Joint Venture 2013 Implementation Plan,
- Oregon SONEC Working Wet Meadows Initiative; Conservation Delivery Business Plan, Intermountain West Joint Venture (March 2014),
- NRCS Conservation Effects Assessment Project, Farm Bill Conservation Programs Can Help Meet the Needs of Spring-Migrating Waterfowl in Southern Oregon-Northeastern California,
- Audubon Important Bird Area,
- Meets the requirements for Western Hemisphere Shorebird Reserve Network (WHSRN) site, and
- Key Wetland site identified in the Intermountain West Waterbird Conservation Plan.

The Intermountain West Joint Venture has identified four priority conservation actions; 1. Conserve flood-irrigated habitat on working rangeland, 2. Restore and enhance wetland habitat on NWRs, wildlife areas, and other protected lands, 3. Secure adequate water supplies for public wetlands, and 4. Facilitate conservation science and planning for the implementation of their conservation vision (Intermountain West Joint Venture, 2013). The Harney Basin Wetlands are a critical element of this conservation focus.

Partnerships including the High Desert Partnership and the NRCS Local Work Group have identified both waterbird habitat and Malheur Lake carp management as priorities. These partnerships provide both common purpose and federal funding for actions that support the common initiative. The Cooperative Conservation Plan for MNWR is the on-refuge guide but also calls for a cooperative effort across the refuge boundaries. The current cooperative approach is well supported in the community and by the public agencies involved.

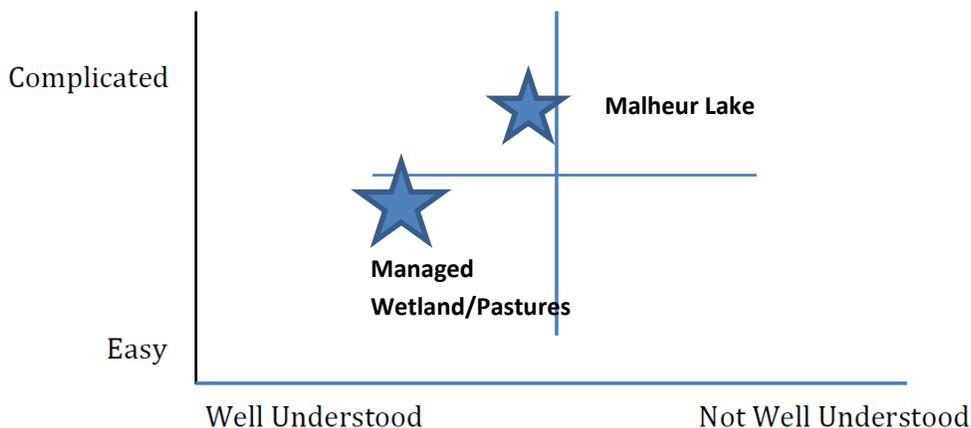
Focus for conservation on private lands is led by the two Conservation Implementation Strategies for Harney County, Harney Basin Aquatic Health Improvement focuses on carp management and the Working Lands for Waterbird Conservation focuses on the flood irrigated pastures and meadows of the NRCS

This strong and consistent focus by public and private entities creates the opportunity for significant ecological benefits from a concerted funding effort to create shared outcomes.

## 6. Economic Benefits

The Harney Basin wetlands are a significant draw for tourists to Harney County. Efforts to maintain the viability of the visitor draw will help with the service economy of Harney County. Maintaining the flood irrigated pastures and wet meadows of the Silvies River floodplain and maintaining grazing on the Blitzen floodplain will strengthen the long-term viability of the important ranching economy for Harney County. The potential of using carp as an economic resource offers a new potential for improving employment and economic conditions to Harney County which has one of the highest unemployment rates in the state. This proposed focus area has strong public and private support and the High Desert Partnership is very confident that dedicated state funds will be readily matched by North American Wetlands Conservation Act funds, NRCS funds and other funds dedicated for wetland and waterfowl conservation.

## 7. Priority



The judgment that carp management in Malheur Lake is considered relatively complicated because of the logistic considerations of widely varying lake conditions and untested harvest methods, not because of the complexity of the ecological issues.

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***"Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest."***

Aldo Leopold from Conservation Economics (1934) in River of the Mother of God

**Harney Basin Wetlands Initiative Partners**

Local ranchers and farmers

Audubon Society of Portland

Burns Paiute Tribe

Defenders of Wildlife

Ducks Unlimited

Harney County Court

Harney Soil and Water Conservation District

High Desert Partnership

Intermountain West Joint Venture

Malheur Wildlife Associates

Oregon Department of Fish and Wildlife

Oregon Habitat Joint Venture

Oregon Watershed Enhancement Board

Oregon Wildlife

The Nature Conservancy

The Wetlands Conservancy

USDA Natural Resources Conservation Service

U.S. Fish and Wildlife Service