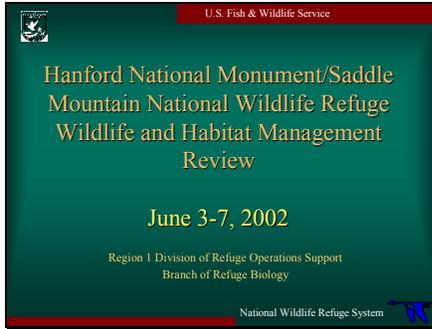


Slide 1



Slide 2



Slide 3



Slide 4

U.S. Fish & Wildlife Service

Review Goals (Cont.)

- Evaluate existing or identify new management priorities and strategies that will be used in the development of the refuge's comprehensive conservation plan (CCP) and habitat management plan (HMP)
- Evaluate existing or identify new baseline wildlife and habitat inventory, monitoring, and research needs required to implement adaptive management

National Wildlife Refuge System

Slide 5

U.S. Fish & Wildlife Service

Policy Guiding Refuge Management

- NWRs Improvement Act (1997)
- Biological Integrity, Diversity, and Environmental Health Policy (601 FW3)
- Habitat Management Policy (620 FW1)

National Wildlife Refuge System

Slide 6

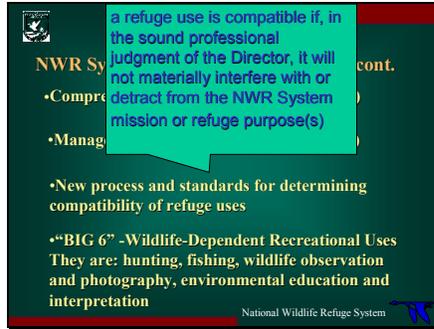
U.S. Fish & Wildlife Service

NWR System Improvement Act (1997)

- First Organic Act for the NWR System
- Strong Singular Mission
- Wildlife first!
- Each refuge shall be managed to fulfill System Mission and purpose(s) of the refuge
- Maintain biological integrity, diversity and environmental health of NWRs

National Wildlife Refuge System

Slide 7



NWR System

a refuge use is compatible if, in the sound professional judgment of the Director, it will not materially interfere with or detract from the NWR System mission or refuge purpose(s)

cont.

- Compre
- Manag

•New process and standards for determining compatibility of refuge uses

•“BIG 6” -Wildlife-Dependent Recreational Uses
They are: hunting, fishing, wildlife observation and photography, environmental education and interpretation

National Wildlife Refuge System

Slide 8



U.S. Fish & Wildlife Service

Refuge Improvement Act (1997)

- The Mission

The Mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

National Wildlife Refuge System

Slide 9



U.S. Fish & Wildlife Service

Policy Guiding Refuge Management

- NWRS Improvement Act (1997)
- Biological Integrity, Diversity, and Environmental Health Policy (601 FW3)
- Habitat Management Policy (620 FW1)

National Wildlife Refuge System

Slide 10

U.S. Fish & Wildlife Service

Biological Integrity, Diversity, Environmental Health (601 FW3)

The Service's priority is maintaining and where appropriate restoring:

- **Biological Diversity**
 - The variety of life and its processes
- **Biological Integrity**
 - Biotic composition, structure, and function of organisms and communities

National Wildlife Refuge System

Slide 11

U.S. Fish & Wildlife Service

Biological Integrity, Diversity, Environmental Health (601 FW3)

- **Environmental Health**
 - Soil, water, and air
- **Historic Conditions**
 - Conditions prior to substantial human related changes to the landscape

National Wildlife Refuge System

Slide 12

U.S. Fish & Wildlife Service

Policy Guiding Refuge Management

- **NWRS Improvement Act (1997)**
- **Biological Integrity, Diversity, and Environmental Health Policy (601 FW3)**
- **Habitat Management Policy (620 FW1)**

National Wildlife Refuge System

Slide 13

U.S. Fish & Wildlife Service

Habitat Management (620 FW1)

Policy requires:

- Habitat management plan (HMP) and where appropriate Annual HMPs for each refuge in the NWRS.
- HMPs should be reviewed and updated every 15 years or when developing/revising CCPS
- HMPs should be internally peer reviewed every 5 years

National Wildlife Refuge System

Slide 14

U.S. Fish & Wildlife Service

How Does Service Policy Regarding Refuge Management Relate to the Monument?

"All areas managed by the FWS within the Hanford Site will be managed as an overlay Refuge unit of the National Wildlife Refuge System unless otherwise noted by amending this agreement." (June 2001 MOU between the USFWS and USDOE)

"Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national monument shall be the dominant reservation." (Proclamation 7319 June 9, 2000)

National Wildlife Refuge System

Slide 15

U.S. Fish & Wildlife Service

How are the Purpose(s) of the Monument Derived?

"I, William J. Clinton ...do proclaim that there are hereby set apart and reserved as the Hanford Reach National Monument, for purpose of protecting the objects identified above..." (Proclamation 7319 June 9, 2000)

National Wildlife Refuge System

Slide 16

U.S. Fish & Wildlife Service



Purposes of the Hanford Reach National Monument/Saddle Mountain NWR

- Protect habitat for state and federally listed plant and animal species associated with the Hanford Reach of the Columbia River and the surrounding shrub-steppe ecosystem.
- Preserve the native biodiversity and species abundance of the Hanford Reach of the Columbia River and the surrounding shrub-steppe ecosystem.

National Wildlife Refuge System 

Slide 17

U.S. Fish & Wildlife Service



Purposes of the Hanford Reach National Monument/Saddle Mountain NWR (Cont.)

- Conserve and manage waterfowl and neotropical and other migratory birds which use the Hanford Reach of the Columbia River and the adjacent shrub-steppe ecosystem.
- Restore natural, dynamic stream/river systems, including associated in-water and riparian habitats for anadromous fish, breeding neotropical birds, and other native fish and wildlife.

National Wildlife Refuge System 

Slide 18

U.S. Fish & Wildlife Service



Purposes of the Hanford Reach National Monument/Saddle Mountain NWR (Cont.)

- Provide opportunities for quality, wildlife dependent recreation, education, and research to enhance public appreciation, understanding, and enjoyment of refuge fish, wildlife, and habitats.
- Preserve the cultural history of the area through the exercise of reserved treaty rights of the Yakama Indian Nation, the confederated Tribes of the Umatilla Indian Reservation, and the Nez Perce Tribe, with the exception of livestock grazing, and in cooperation with the Wanapum People.

National Wildlife Refuge System 

Slide 19

U.S. Fish & Wildlife Service

Composition and Role of the Review Team

- Core team
- Extended team

National Wildlife Refuge System

Slide 20

U.S. Fish & Wildlife Service

Extended Team

- Experts from other agencies (county, state, federal)
- University Professors and Researchers
- Private sector

National Wildlife Refuge System

Slide 21

U.S. Fish & Wildlife Service

Review Phases

- Core team meeting (half/full day)
- Field tour (2-4 days): Core and Extended Teams
- Closeout (last half to full day): Core Team

National Wildlife Refuge System

Slide 22

U.S. Fish & Wildlife Service

How do the invited Review Team Members Provide Input?

- Participate in the discussion at each stop of the field tour
- Comments were noted and used during the closeout by the core team to develop review recommendations
- Additional information can be submitted to the refuge in writing to be considered during the development of the CCP

National Wildlife Refuge System

Slide 23

U.S. Fish & Wildlife Service

Report Approval Process

•The Team Leader:

- Submits completed draft to core team
- Incorporates comments from core team into report
- Submits draft to refuge supervisor for review
- Incorporates comments from the refuge supervisor

•Final draft signed by Team Leader, Refuge Supervisor, and approved by the Regional Chief

National Wildlife Refuge System

Slide 24

U.S. Fish & Wildlife Service

Shrub-Steppe Conservation and Management

Issue: Connectivity of the Monument/SMNWR with adjacent state, federal, tribal, and private shrub-steppe habitat

- Shrub-steppe communities of regional importance
- Restoration and connection of Monument communities with adjacent lands improves ecosystem functionality supporting shrub-steppe obligate species



National Wildlife Refuge System

Slide 25

U.S. Fish & Wildlife Service

Issue: Restoration of shrub-steppe.

- Historically, shrub-steppe was a mosaic of shrubs and grasses/forbs
- Fires were historically small and contributed to the mosaic of shrubs and grasses/forbs
- Natural 70- to 120-year fire interval has been decreased to approximately 3- to 6-years because of cheatgrass
- Without fire suppression and aggressive initial attack capabilities, sagebrush shrub-steppe will continue to be lost.



National Wildlife Refuge System

Slide 26

U.S. Fish & Wildlife Service

Hanford Reach Ecology

Issue: Relicensing under FERC

- To conduct hydropower operations at Priest Rapids Dam Grant Counties FERC permit will expire within the next 3 years and must submit its final permit application by October 2003 in order to maintain its license



- In addition, the Vermita Bar Agreement must be replaced concurrently with the FERC permit. (specifies flow regimes and acceptable levels of water variation to protect salmon associated with hydropower operations at Priest Rapids Dam).

National Wildlife Refuge System

Slide 27

U.S. Fish & Wildlife Service

Topics discussed for this issue included:

- Completion of the 2-D hydrological model to assess water-level variation from hydropower generation
- Mortality of juvenile fall chinook from stranding and entrapment
- Infestation of invasive species (e.g., loosestrife, phragmites, saltcedar, mulberry)
- Loss of riparian habitat (willow and cottonwood) at normal highs
- Sedimentation of backwater areas
- Impacts to wildlife including nesting aquatic migratory birds (e.g., herons, gulls, Canada geese, landbirds), other native fishes (e.g., sculpin), and mammals (e.g., deer, mink, beaver, otter)
- Impacts to rare plants (*Rorippa columbia*)
- Impacts to archaeological resources on islands exposed from erosion;
- Flushing of nuclear and chemical contaminants including but not limited to cobalt-60, strontium-90, and chromium along the river bank

National Wildlife Refuge System

Slide 28

U.S. Fish & Wildlife Service

Issue: Public use (Hanford Reach)

- The 51-mile Hanford Reach is open to the general public for fishing and boating
- There is a concern regarding the current level of disturbance to migratory birds (e.g., heron rookery) associated with boating activities



National Wildlife Refuge System

Slide 29

U.S. Fish & Wildlife Service

Issue: White Bluffs Sloughing

Subsurface movement of drainage return flows from the Columbia Basin Irrigation Project along an impermeable clay layer may have recently resulted in mass wasting of the bluffs into the river as well as on to Monument lands.



National Wildlife Refuge System

Slide 30

U.S. Fish & Wildlife Service

Issue: Hanford Dune Field Transfer

- The Service is interested in acquiring the Hanford Dune Field from DOE.
- The Dunes have significant and unique biological (e.g., rare plants, invertebrates) as well as archaeological resources associated with it.
- DOE is concerned about security of Central Hanford as well as human safety



National Wildlife Refuge System

Slide 31

U.S. Fish & Wildlife Service

Fire Management

Issue: Fire Suppression

- Restoration of natural fire interval is essential for the protection and restoration of native plant communities



National Wildlife Refuge System

Slide 32

U.S. Fish & Wildlife Service

Issue: Fire breaks



- Need and types of fire breaks to reduce the severity of fires
- No clear consensus on the how when and where fire breaks would be used

National Wildlife Refuge System

Slide 33

U.S. Fish & Wildlife Service

Issue: Fire monitoring

- Monitoring is required to assess fire impacts and effectiveness of habitat restoration

National Wildlife Refuge System

Slide 34

U.S. Fish & Wildlife Service

Wildlife Species Management

Issue: Sage Grouse Management

- A sage grouse listing petition has determined that the Washington population is a Distinct Population Segment (DPS) from Oregon and Idaho populations.
- The statewide population of sage grouse is 900-1,000 birds.
- The Department of Defense Yakama Training Center (YTC), (existing populations), along with the Monument SMNWR (unoccupied), and the Yakama Indian Reservation Lands (unoccupied), are critical to the recovery of sage grouse in Washington.

National Wildlife Refuge System

Slide 35

U.S. Fish & Wildlife Service

Elk Management



- The current elk herd inhabiting the Monument during the winter is approximately 450 which is above the state's objective level of 350 animals.
- During the summer months (calving season) fewer than 300 animals occupy the ALE unit.
- Animals tend to be pushed onto the ALE unit during the fall hunting season, because the area is free from human disturbance.
- Agricultural damage on private lands adjacent to the ALE unit occasionally occurs during late summer.
- Because of this issue, the Service has partnered with the Washington State Department of Fish and Wildlife, the Tribes and DOE to reduce the herd.

National Wildlife Refuge System

Slide 36

U.S. Fish & Wildlife Service

Contaminants

Issue: Identification and clean-up

- The Monument/SMNWR faces a wide range of contaminant issues that have or potentially can affect management actions and public-use opportunities including:
 - former production and storage of nuclear materials at Central Hanford;
 - organochlorine-based insecticides and lead-sheathed communications cables;
 - BOR Columbia Basin Irrigation Project runs wastewater through the Wahluke and Saddle Mountain units of the Monument.

National Wildlife Refuge System

Slide 37

U.S. Fish & Wildlife Service

Invasive Species Management

Issue: Control invasive species through IPM

- Non-native invasive species (e.g., knapweed cheatgrass) are one of the primary threats to the native plant and animal diversity on the Monument/SMNWR is non-native, invasive species



National Wildlife Refuge System

Slide 38

U.S. Fish & Wildlife Service

Wahluke Unit

Issue: Public use impacts on White Bluffs

- Public use is impacting sensitive species (White Bluffs Badgerpod) along the White Bluffs Overlook
- Goose hunters have dug pits and cut sagebrush every year to construct up to 30 blinds along 1.5 miles of the Bluffs for pass shooting Canada geese



National Wildlife Refuge System

Slide 39

U.S. Fish & Wildlife Service

Issue: Trails for Hikers and horseback riders



- Unregulated recreation uses including hiking, hunting, and horseback riding currently occurs on the Wahluke Unit
- No trails or improved facilities (e.g., parking lots, water, toilets, corrals) currently are available

National Wildlife Refuge System

Slide 40

U.S. Fish & Wildlife Service

Wetland Restoration

- The wetland impoundment on the Wahluke Unit adjacent to the agricultural field on the Columbia River no longer functions as a result of a washed out levee.
- Because water levels cannot be maintained in this wetland, it has been infested by invasive species (e.g., knapweed)



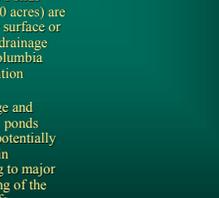
National Wildlife Refuge System

Slide 41

U.S. Fish & Wildlife Service

WB 10 Ponds

- The WB-10 Ponds (800 to 1000 acres) are supplied by surface or subsurface drainage from the Columbia Basin Irrigation Project
- The drainage and subsequent ponds have been potentially implicated in contributing to major mass wasting of the White Bluffs



National Wildlife Refuge System

Slide 42

U.S. Fish & Wildlife Service

Issue: Public access to Saddle Mountain Lake



- Managed by the Service since 1971 under a 30-day revocable use permit with DOE
- The Columbia Basin Irrigation Project maintains an irrigation return canal that created and supplies water to Saddle Mountain Lake
- This unit has been closed to the public since the 1940s

National Wildlife Refuge System
