



Yakima River Basin Water Enhancement
Project Workgroup

Status of the Yakima Basin Integrated Plan

Yakima Basin Science and Management Conference
June 12, 2013

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Phil Rigdon, Yakama Nation

Cynthia Wilkerson, The Wilderness Society





Outline

- Yakima Basin Overview and Challenges
- Yakima Basin Integrated Plan
- Current Status and Next Steps



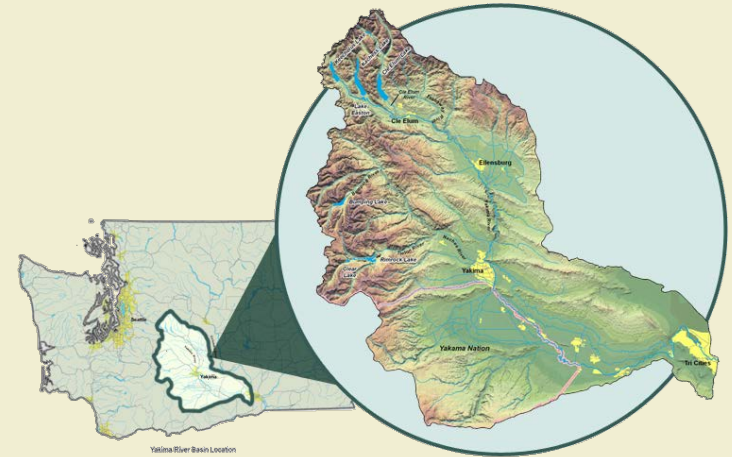


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Yakima Basin: Overview



- 4 million acres
- Largest agricultural-producing region in Northwest
 - \$1.8 billion Ag; \$2.3 billion food processing industry
 - Apples, wine grapes, hops, hay
- Second only to Snake River in supporting salmon and steelhead runs
- Water is Over Allocated
- Diverse outdoor recreation
 - Pack and saddle, hiking, dirt biking, camping, fishing, hunting, snowmobiling





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Yakima Basin Water Management



- Managed by Bureau of Reclamation
- 5 reservoirs with 1 million acre-feet of capacity (average annual runoff 3.3 million acre-feet)
- Snowpack is the “sixth reservoir”
- Irrigation deliveries: 1.7 million acre-feet
- Water is Over Allocated





Declining Water Supply

- Surface water is over- appropriated
- Droughts in 1992-1994, 2001 and 2005
- Proratable irrigation districts reduced to as little as 37% of allotments
- Snowpack declining (12-71% runoff)
- Groundwater availability limits urban development





Reduced Fisheries



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- Historic salmon and steelhead run
 - 800,000 fish
- Average run size last 10-15 years
 - 15,000-20,000 fish
- Native coho, sockeye and summer Chinook extirpated
 - Coho reestablished, sockeye being reestablished
- Spring and fall Chinook
 - Seriously reduced
- Steelhead and bull trout
 - ESA Threatened species



Scott Burtner, Flickr



An Emerging Solution



Yakima Basin Integrated Plan Goals:

1. Restore and enhance ecological function and provide fish passage
2. Improve water supply during drought years (70% proratable supply)
3. Provide for efficient and adaptable water supply management
4. Contribute to sustainable economy and environment



Integrated Plan Grew from Yakima River Basin Water Enhancement Project



1979
YRBWEP Feasibility
Study Authorization

YRBWEP Phase I: Fish Screens & Ladders

YRBWEP Phase II: Conservation & Instream Flows

Storage Study EIS

Ecology EIS

YRBWEP
Workgroup
Involvement

Work
Group

Basin
Study

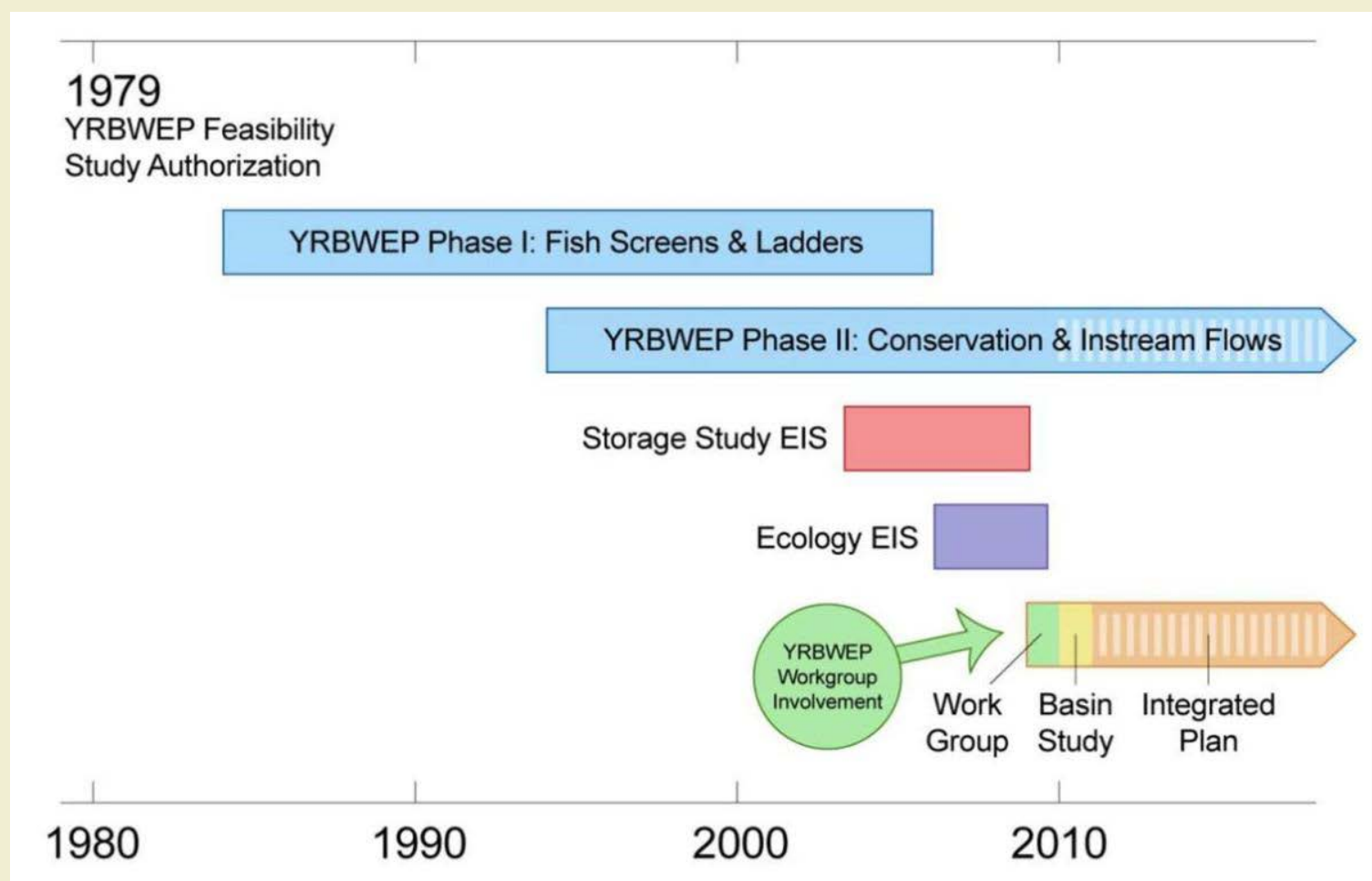
Integrated
Plan

1980

1990

2000

2010





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YBIP Work Group Members

Federal Agencies

Bureau of Reclamation
National Marine Fisheries Service
U.S. Fish and Wildlife Service
U.S. Forest Service

Yakama Nation

Yakama Nation Natural Resources
Yakima/Klickitat Fisheries Project

Washington State Agencies

Department of Ecology
Department of Agriculture
Department of Fish and Wildlife

Local Governments

Benton County
Kittitas County
Yakima County
City of Yakima

Irrigated Agriculture

Kennewick Irrigation District
Kittitas Reclamation District
Roza Irrigation District
Sunnyside Valley Irrigation District
Yakima-Tieton Irrigation District

Other Stakeholders

American Rivers
Yakima Basin Fish & Wildlife
Recovery Board
Yakima Basin Storage Alliance



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Yakima Basin Integrated Plan



Seven Elements:

1. Reservoir Fish Passage
2. Structural and Operational Changes
3. Surface water storage
4. Groundwater storage
5. Water Conservation
6. Water Marketing
7. Habitat Enhancement and Protection

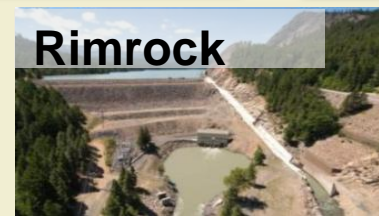
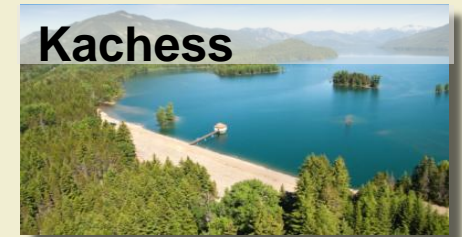
Programmatic Environmental Impact Statement



Reservoir Fish Passage

Benefits:

- Access to high quality habitat
- Increase anadromous species abundance
- Reintroduction of sockeye
- Genetic interchange for bull trout





Structural and Operational Changes



- Keechelus-to-Kachess tunnel or pipeline
- Kittitas Reclamation District canal modifications and new pump station
- Reduce power diversions at Roza and Chandler Dams
- Wapatox Canal improvements
- Raise Cle Elum Lake by 3 feet





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Surface Water Storage



- **Wymer Dam and Pump Station**

- New off-channel reservoir, 163,000 acre-feet

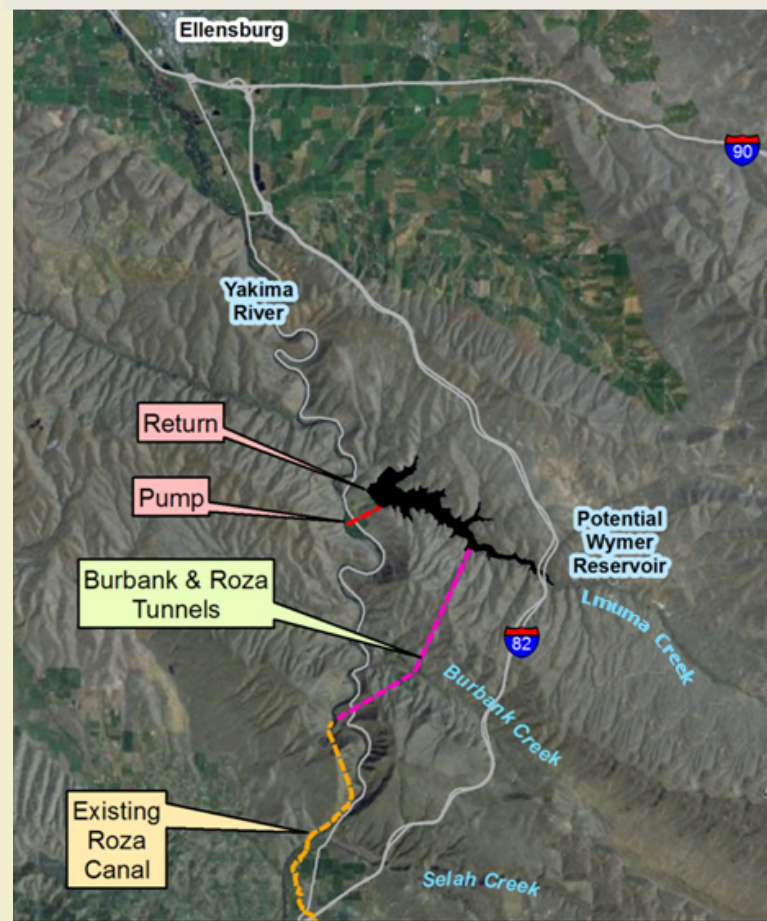
- **Lake Kachess Inactive Storage**

- Existing Reservoir: Access 200,000 acre-feet from inactive storage pool in dry years

- **Bumping Lake Enlargement**

- Replace existing dam to add 165,000 acre-feet

Proposed Wymer Reservoir



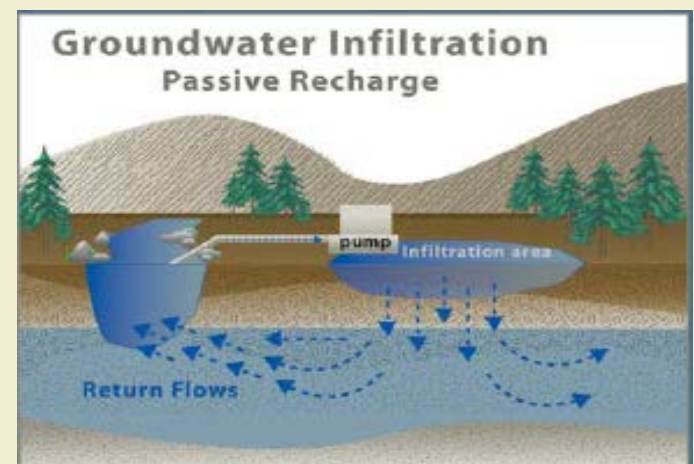
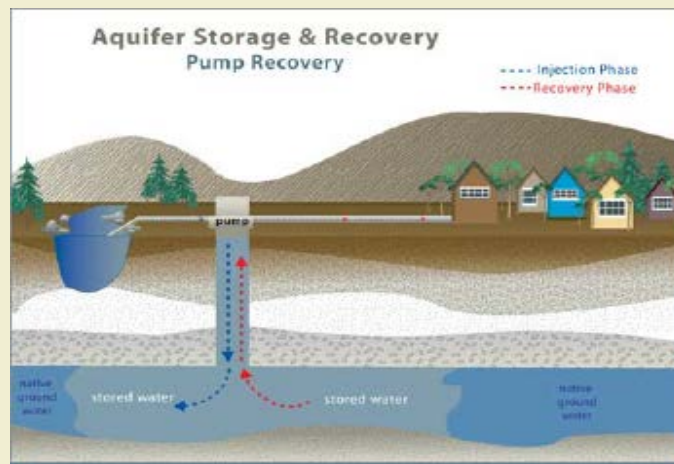


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Groundwater Storage



Use surface water during periods of high runoff.
Recharge aquifers for later withdrawal.





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Water Conservation



Agricultural Conservation

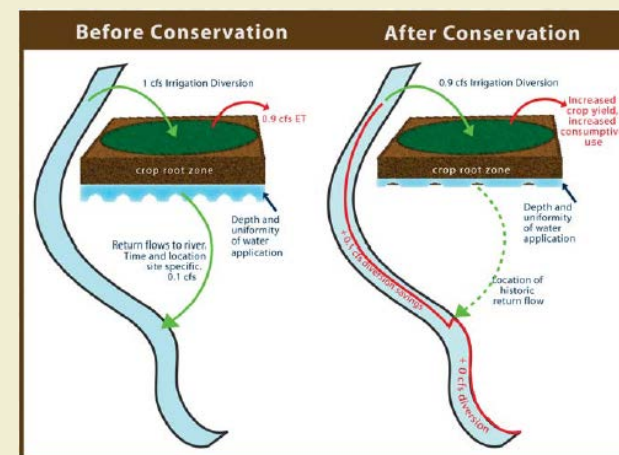
(Up to 170,000 acre-feet)

- Lining/piping canals and laterals
- Re-regulation reservoirs
- Irrigation efficiency: reduce seepage, evaporation and spills



Municipal and Domestic Conservation Program

- Promote efficient landscape irrigation practices
- Expand education/incentives to encourage voluntary efficiency
- Establish best practice standards





Water Marketing



Near-term effort

- Build on existing water market programs
- Take steps to reduce barriers

Longer-term effort

- Focus on water transfers between districts
- Allow fallowing within district, leases to outside district
- Requires substantial changes to existing laws/policies





Habitat/Watershed Protection and Enhancement



Headwaters land acquisitions

- 50,000 acres in Teanaway Basin
- 15,000 acres in Yakima Canyon
- 10,000 acres at Little Naches headwaters



Protective designations on public lands and waters (Congressional Action)

- 140,000 acres National Recreation Area
- 21,000 acres Wilderness
- 200 miles Wild and Scenic River designation

Principles

- Watershed, recreation, economic values
- Compliments other elements
- Maintain working lands
- Willing sellers
- Long-term funding

Mainstem floodplain and tributaries fish habitat enhancement program

Before



After



Habitat Restoration



Partners



Recreation

Back Country Horsemen of Washington
Kittitas County Parks & Recreation
District 1
Washington Trails Association

Conservation

American Rivers
Conservation Northwest
Forterra
Kittitas Conservation Trust
Mountains to Sound Greenway
National Wildlife Federation
Rocky Mountain Elk Foundation
The Nature Conservancy
The Wilderness Society
Trout Unlimited
Trust for Public Land
Washington Environmental Council
Yakima Greenway Foundation

Local Communities

City of Cle Elum	City of Wapato
City of Ellensburg	City of Yakima
City of Mabton	City of Zillah
City of Moxee	Town of Granger
City of Roslyn	Town of Harrah
City of Union Gap	Town of Naches

Businesses

Central Washington Homebuilders Association
Kittitas County Chamber of Commerce
Plum Creek Timber Company
Vision Cle Elum
Yakima Chamber of Commerce
Yakima County Development Agency



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What's at Stake: Fish Populations





What's at Stake: Future of Agriculture



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Stan Hieronymus, Flickr



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What's at Stake: Future Access



- **AFLC Teanaway lands**
- **Checkerboard**



What's at Stake: Sustainable Use



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Next Steps: Work in FY13

- On-going in-basin outreach
- Lands designation package
- Federal agency support group
- State legislation/capital budget request
- Federal funding
- Early Actions





Next Steps: State Legislation

- **Policy Bill – Governor’s Request**
 - HB 1414; SB 5367
- **Capital Budget**
 - \$22.55 million: Water Storage and Water Supply Infrastructure Improvements
 - \$12.45 million: Fish Passage and Habitat Restoration
 - \$10.5 million: Watershed Lands Acquisition

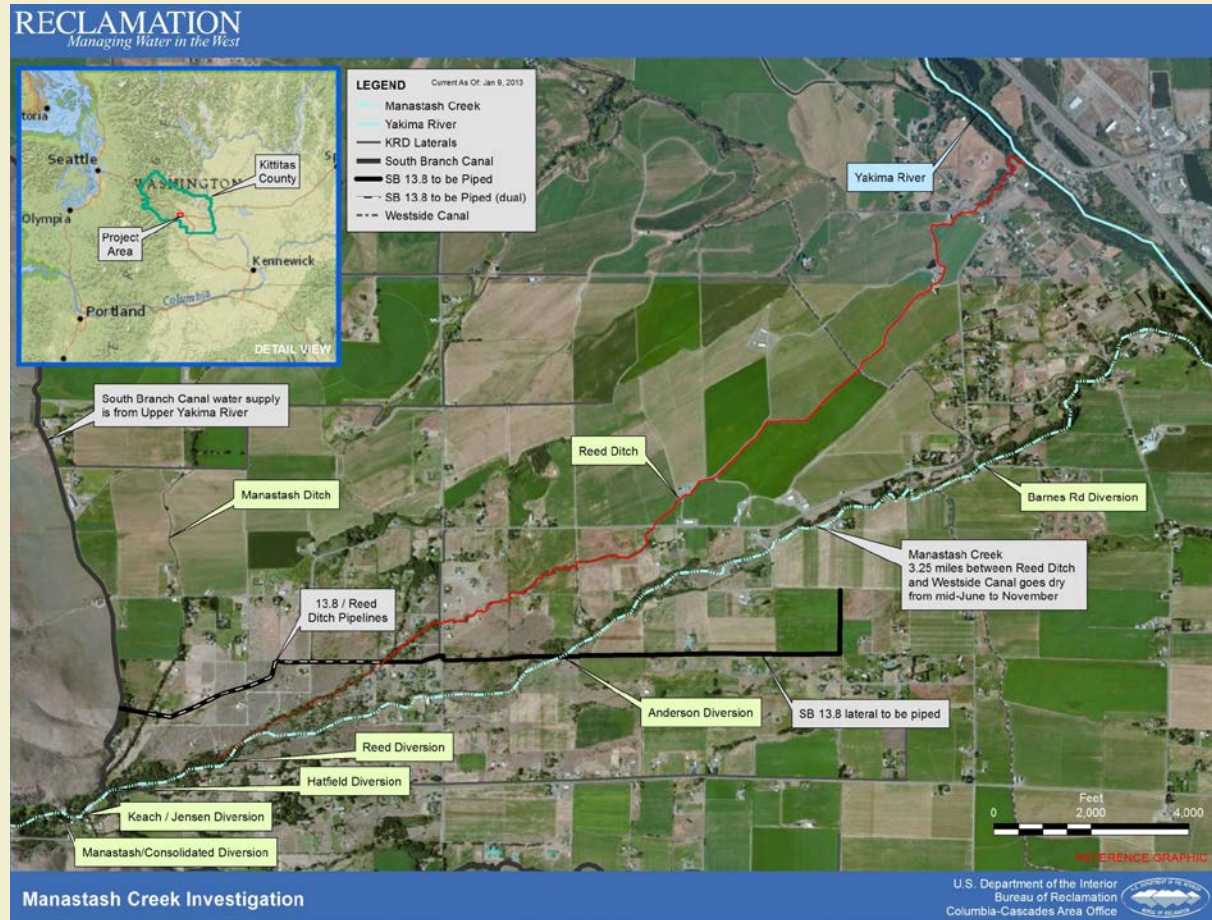
Total request: \$45 million

- **Senate Budget: \$132 million**
- **House Budget: \$45 million**





Early Action – Manastash Creek





Discussion



The Future of the Yakima Basin Depends on us ALL!



More Information



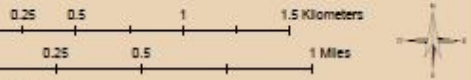
- **Ecology's Website**
www.ecy.wa.gov/programs/wr/cwp/cr_yak_storage.html
- **Reclamation's Website**
www.usbr.gov/pn/programs/yrbwep/2011integratedplan/index.html
- **Yakima Basin Conservation Campaign**
www.yakimaforever.org





Legend

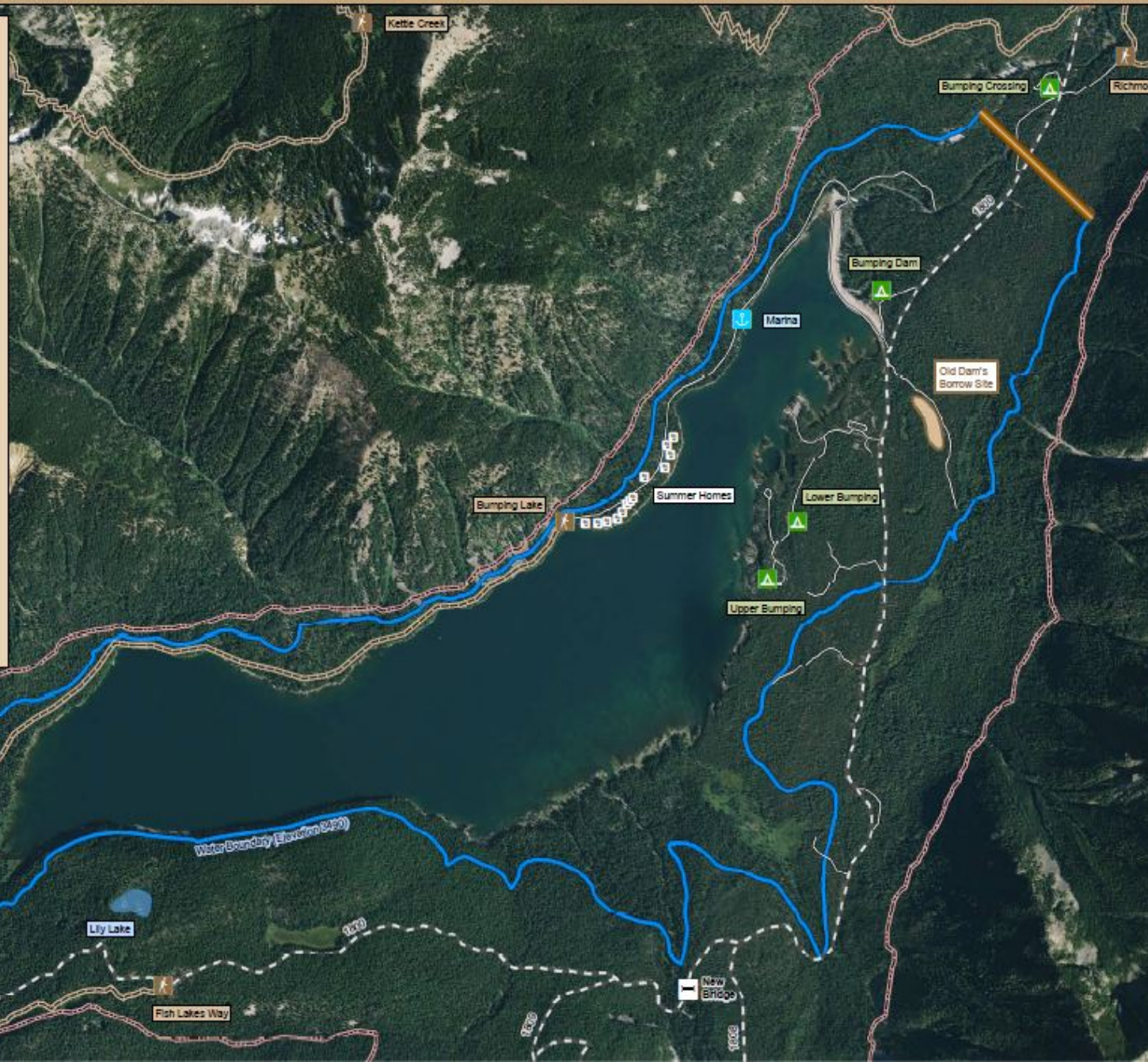
	Campgrounds		Wilderness Boundary
	Summer Homes		Transportation (F.S. 1800, 1808, 1809)
	Marina		Transportation (Secondary)
	Bridges (New)		New Reservoir Level (Elevation 3450)
	Trailheads		New Bumping Lake Dam
	Trails		Old Bumping Dam Borrow Site
	Lily Lake		



Source Information:
 Cartography: U.S. Bureau of Reclamation, Cascades-Columbia Area Office
 Projection: Washington State Plane, South Zone, NAD 83, Feet
 Produced: March 1, 2011 (Last Modified on March 28, 2012)
 NOTE: THIS MAP DOES NOT CONFORM TO THE NATIONAL MAP ACCURACY STANDARD

Legend:
 Campgrounds = Digitized using 7.5 Minute USGS DRG data (1:24,000 NMAAS)
 Summer Homes = Located using the USFS Constructed Features GDB (1:24,000 NMAAS)
 Marina = Digitized using 2009 NAIP photography (1:12,000 NMAAS)
 Bridges (New) = Located using 2009 NAIP photography and USFS information (1:12,000 NMAAS)
 Trailheads = Located using the USFS Transportation GDB (1:24,000 NMAAS)
 Trails = Located using the USFS Transportation GDB (1:24,000 NMAAS)
 Lily Lake = Digitized using 2009 NAIP photography (1:12,000 NMAAS)
 Wilderness Boundary = Located using the USFS Management Direction GDB (1:24,000 NMAAS)
 Transportation = Located using the USFS Transportation GDB (1:24,000 NMAAS)
 New Reservoir Level = Contractor supplied data set, probably based on 30 meter DEM data
 Old Bumping Dam Borrow Site = Digitized using 2009 NAIP photography and a map from the original Bumping Dam construction (1:12,000 NMAAS)
 Photography = Acquired during 2011 by the Aerial Photography Field Office (AFPO) of the USDA's Farm Service Agency.

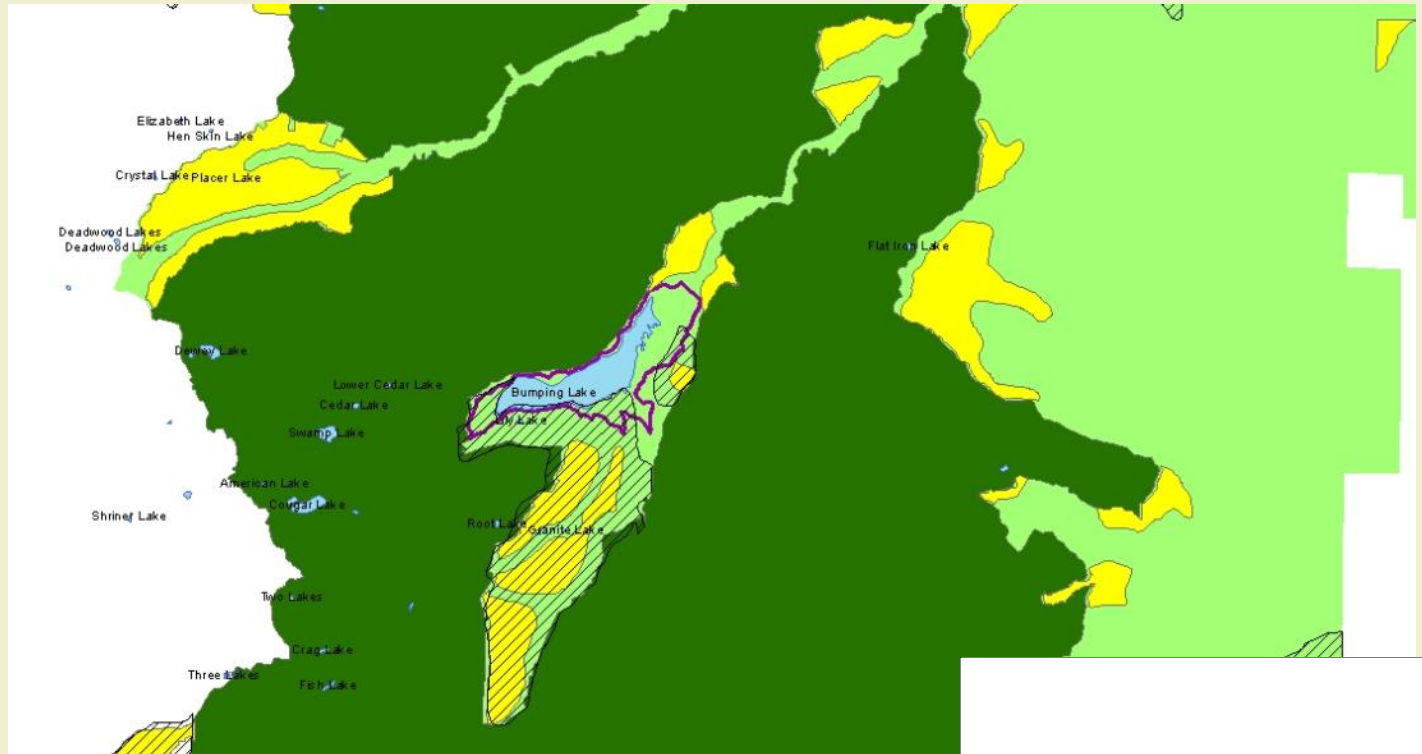
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Bumping Lake Expansion



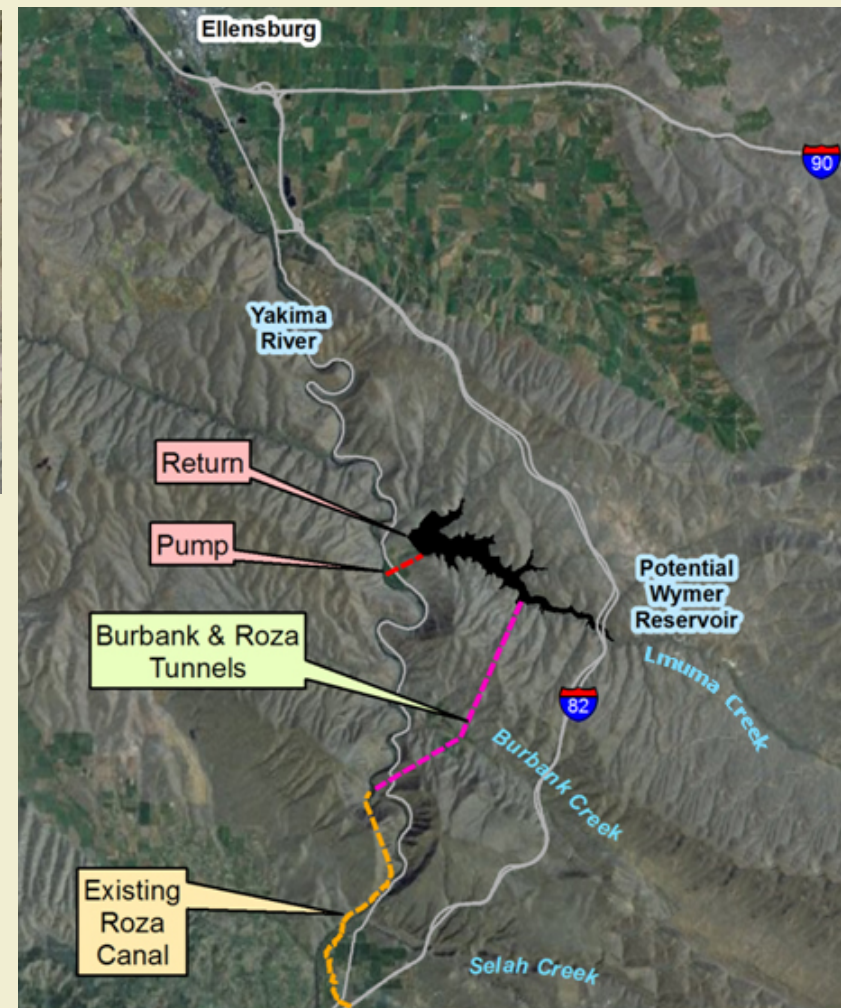


Proposed Wymer Reservoir

Before



After





Kachess Inactive Storage





K to K Conveyance Project





Why Isn't Water Conservation Enough?



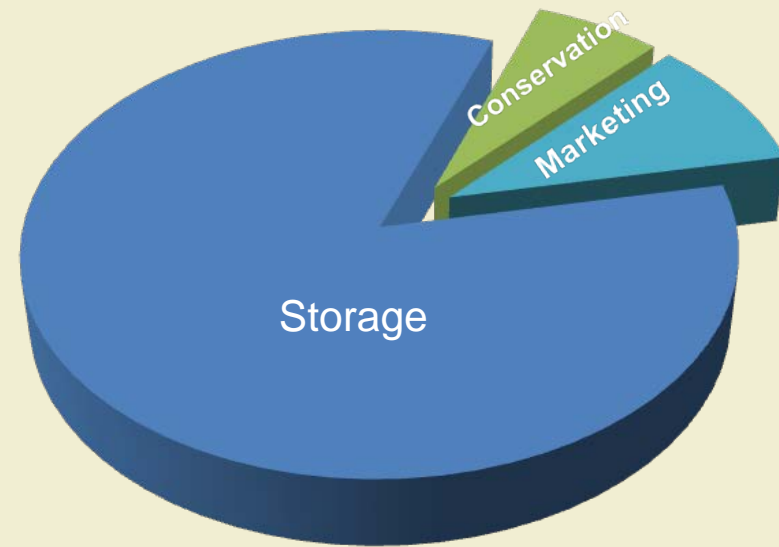
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Water conservation produces only 10,000-50,000 acre-feet of drought year water

Lease market unreliable – only 30,000 acre-feet was transferred in the 2005 drought

New storage is the only way to meet irrigation, municipal, and fish needs in drought – 400,000+ acre-feet



Storage is required to meet drought-year needs

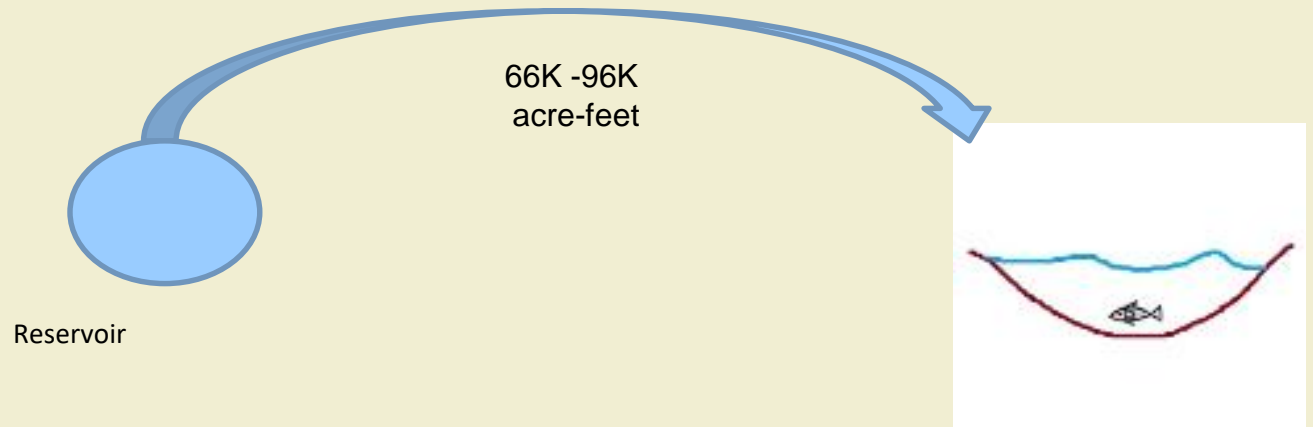


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Water Conservation



Normal Year





Watershed Lands Package



Phase 1 (Fall of 2011) Subcommittee

- Framework (4 components)
- Principles
- Starting Point

2012 – Outreach and Refinement

- Yakima Basin Conservation Campaign
- Kittitas County



Lands Protections - Principles



The Yakima Basin Integrated Plan team is committed to land protection that:

- Enhances watershed and fish habitat protection and preserves or improves recreational opportunities;
- Minimizes negative effects on existing or reasonably foreseeable economic uses;
- Directly complements other actions in the Integrated Plan;
- Purchases private lands only from willing sellers at fair market value;
- Maintains economic uses where lands have historically been used as working lands; and
- Includes long-term funding for restoration and management activities.



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Lands Protections – Starting Point

