



# Water Projects Road Map

PRRIP Governance Committee Meeting  
March 7, 2017

# Overview

- Review WAP project status and scores
- Project scoring work plan
- Water projects road map
  - Timeline
  - Anticipated scores
  - Documentation
- Set stage discussions to follow
  - Broad-scale recharge at Cottonwood Ranch
  - Initial slurry wall storage project



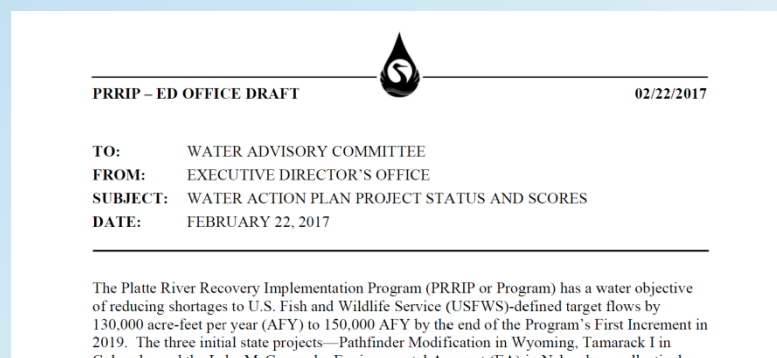
# WAP project status and scores (1)

- 2014 WAP Update (published May 2015)
- 14 WAP projects or concepts carried forward
  - ▣ 2000 Reconnaissance-Level WAP
  - ▣ 2009 WAP Update
- Prioritized by 3 tiers
- Status: active, future, inactive
- Approved scores total 37,300 AFY
  - ▣ J-2 Regulating Reservoirs (30,600 AFY)
  - ▣ Pathfinder Municipal Account Lease (4,000 AFY)
  - ▣ Phelps County Canal Groundwater Recharge (2,700 AFY)



# WAP project status and scores (2)

- Activity since 2014 WAP Update
  - No-Cost NCCW score = 260 AFY (Mar 2016)
  - Cook well score = 160 AFY (Sep 2016)
  - J-2 Reg. Reservoirs on hold (Nov 2016)
- Present score total = 7,120 AFY
- Status and scores update memo to WAC (Feb 2017) and GC (Mar 2017)



# WAP project status and scores (3)

- EDO evaluating new project concepts
  - ▣ Broad-scale recharge
  - ▣ Slurry wall storage (open gravel pit or aquifer)
  - ▣ Acquire & Retire
- Presented progress updates to WAC and GC throughout 2016



# Scoring work plan for 2017

- Complete CPNRD recharge/leasing score
  - As presently operated (update later)
  - Preliminary estimate = 2,600 AFY at 50% Program credit
  - Anticipated for September GC
- Elwood Reservoir recharge
  - As presently operated (update later)
  - Develop groundwater model
  - Anticipated for December GC
- NPPD groundwater recharge through Gothenburg and Dawson County canals
  - At least start in late 2017
  - Conceptually similar to Phelps recharge
  - Separate from NPPD surface water leasing (if/when permits approved)



# Project timelines (1)

- Broad-scale recharge at Cottonwood Ranch
  - ▣ Design and permitting in 2017
  - ▣ Phase I construction and operation in 2018
  - ▣ Full construction and operation in 2019
- Initial slurry wall storage
  - ▣ Functional pilot: about 2 years (2019)
  - ▣ Full-scale project: 2-4 years (subject to land acquisition or site availability)
- **Additional land for water projects identified or in process of acquisition by end of 2019**



# Project timelines (2)

- CNPPID recharge enhanced
  - ▣ Additional recapture wells for Phelps and Elwood
  - ▣ In place by end of 2018
- CPNRD recharge/leasing enhanced
  - ▣ Add storage or recharge to re-time surface water river returns to times of shortage
  - ▣ Land in place by 2019
  - ▣ Construct gravel pits or BSR by 2021
- NPPD recharge/leasing enhanced
  - ▣ 2020-2024 timeframe





# Project timelines (3)

- Full-scale slurry wall storage projects
  - Site 1: 2020-2022
  - Lindstrom: 2022-2024
  - Site 3: 2022-2024
  - Site 4: 2022-2025
  - Site 5: as needed
- Acquire & Retire
  - 2016-2024 timeframe



# Project timelines (4)

**Projected timeline for completion of WAP projects with cumulative scores of 40,000 AFY or greater**

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Land acquisition for water projects (e.g., slurry wall storage, BSR, etc)										
Broad-scale recharge at Cottonwood Ranch										
Preliminary fieldwork (infiltration testing, geophysical surveys, etc.)										
Design and permitting										
Phase I construction and operation										
Full construction and operation										
Initial slurry wall storage										
Preliminary fieldwork (borehole testing, etc)										
Functional pilot										
Full-scale project										
CNPPID recharge enhanced (e.g., add'l recapture wells for Phelps, Elwood)										
CPNRD recharge/leasing enhanced										
NPPD recharge/leasing enhanced										
Full-scale slurry wall storage										
Site 1										
Lindstrom										
Site 3										
Site 4										
Acquire & Retire										



Indicates tentative time, e.g., a project may extend this long, or there may be an initial period of waiting for land acquisition in order to proceed.

# Score estimates

Project	Score Estimate* [AFY]
Pathfinder lease (assume renewed; approved score)	4,000
No-Cost NCCW (approved score)	260
Phelps recharge w/ addt'l wells (includes 2,860 AFY approved score)	3,000
Broad-scale recharge at Cottonwood Ranch	3,000
Elwood recharge w/ addt'l wells	3,000
CPNRD recharge/leasing enhanced	10,000
NPPD recharge/lease enhanced	2,500
Slurry wall storage (multiple sites)	15,000
Acquire & Retire	2,500
<b>TOTAL =</b>	<b>43,260</b>
*Score values that are not yet approved are approximations based on present plans.	



# Questions?

