

# Odessa Groundwater Replacement Program (OGWRP)



East Columbia Basin Irrigation District  
Landowner Meeting  
January 30, 2014  
Big Bend Community College, Moses Lake, WA

Levi Johnson  
East Columbia Basin Irrigation District  
Development Coordinator  
55 N. 8<sup>th</sup> / P.O. Box E  
Othello, WA 99344  
(509) 488-9671  
ljohnson@ecbid.org

Odessa Groundwater Replacement Program (OGWRP) - Landowner Meeting Jan. 30, 2014

- Background
- ELC Improvements
- Delivery System Layout/Design/Cost
- Eligibility Criteria
- Contracts / Permits
- Way Forward
- Panel and Q&A

## Outline





## OGWRP in Brief

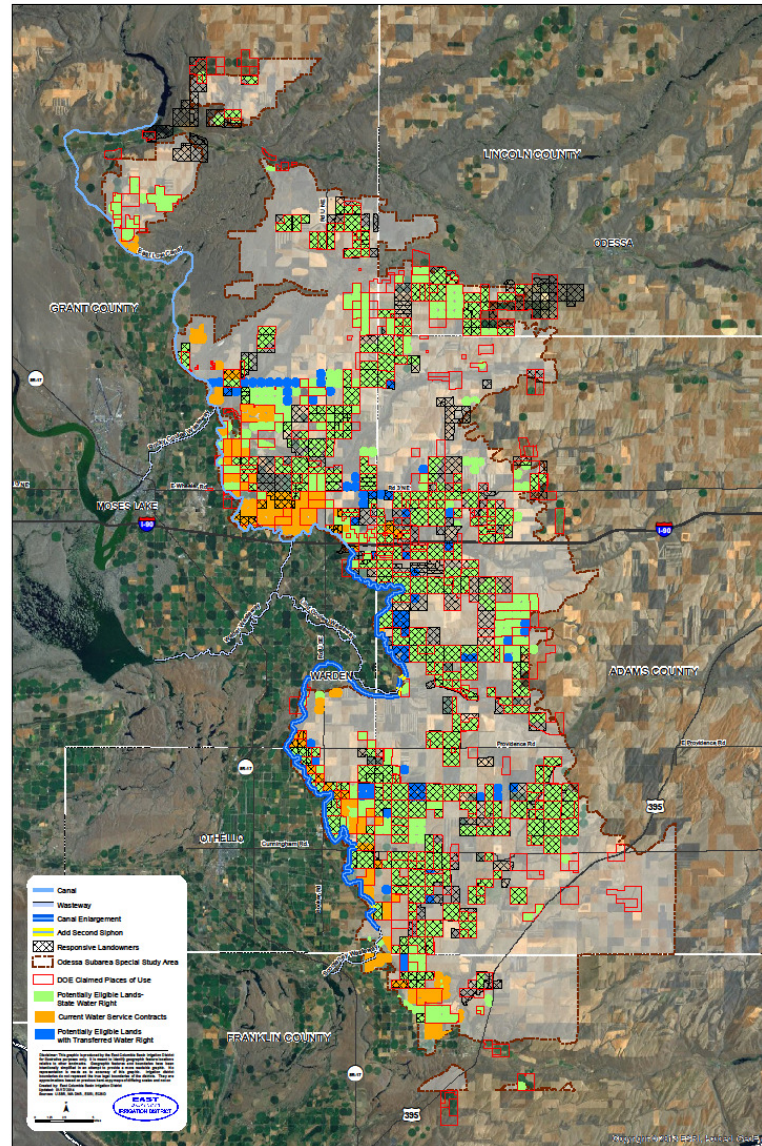
- Columbia River Initiative; MOU 2004
- DOE Office of the Columbia River; Odessa Subarea Special Study 2006
- Record of Decision (ROD): Modified Partial-Replacement—Banks Alternative (Alternative 4A): *April 2, 2013*
- OGWRP TOTAL = 88,000 ac
  - Odessa Subarea Special Study (OSSS) – 70,000 ac
  - Lake Roosevelt Incremental Releases Program (LRIRP) – 10,000 ac
  - Coordinated Conservation Plan– 5,693 ac (currently available)
- Provide groundwater replacement to relieve the aquifer and ensure continued economic development in the CBP.

## Background

# Where is OGWRP?

# Back- ground

Odessa Groundwater Replacement Program (OGWRP)  
Odessa Subarea Special Study Area



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## East Low Canal (ELC) Earthwork

- Zone 1 Earthwork projected completion 2014 (approx. 1 million C.Y. of material):
  - 13.1 miles of ELC, Lind Coulee Wasteway



- Zone 2 Earthwork projected completion 2015 (approx. 1 million C.Y. of material):
  - 31.7 miles of ELC (to Scooteneey Wasteway)

## ELC Improvements

## Siphons/Gates

- 5 additional siphon barrels are required.
- Design work done by USBR expected in February 2014.
- Lind Coulee Siphon No. 2 public bid and install in 2014.
- Additional siphon barrels will require additional funding.
- LCWW Radial Gate installed by 2015.



## ELC Improvements

## County Road Bridges

- 12 County bridge crossings may be impacted.
- Preliminary Cost Analysis to be completed Feb 2014.
- Design work likely to be in summer 2014.
- Zone 1 bridges (4) to be completed in 2015.
- Zone 2 bridges (8) require additional funding.



## ELC Improvements

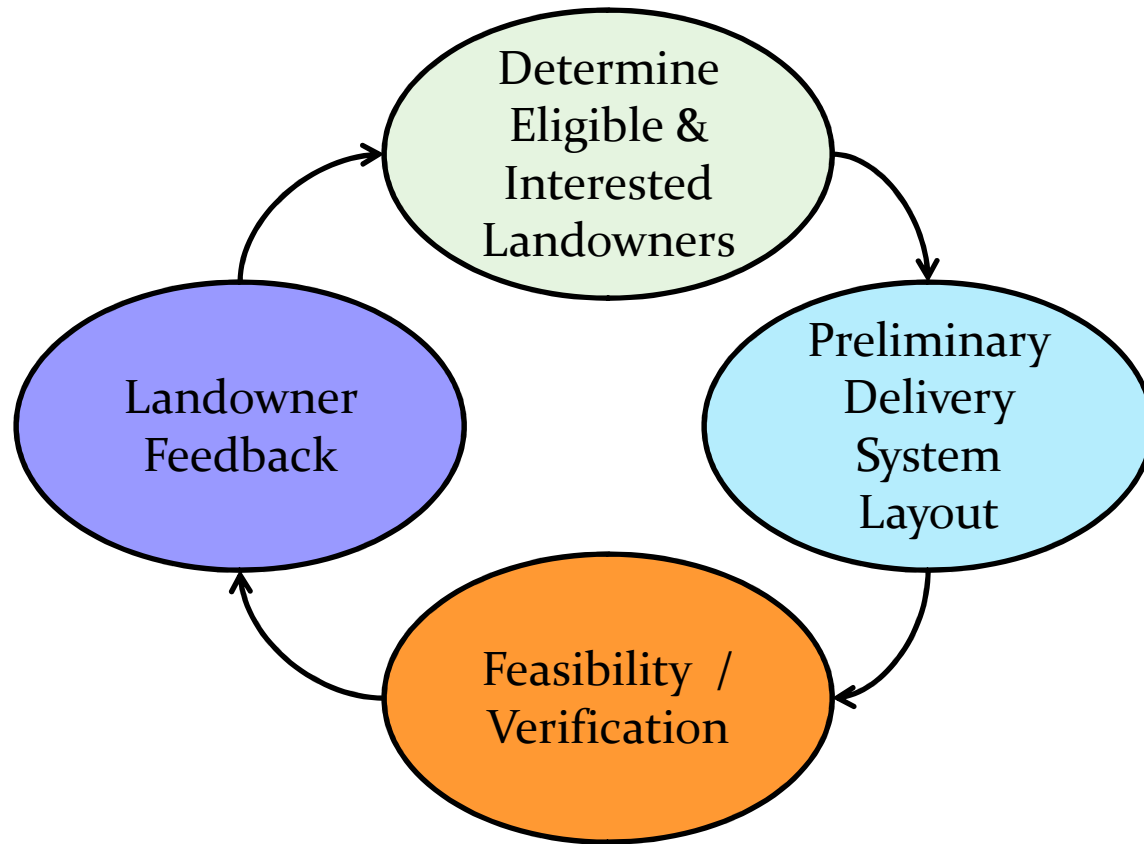
## Odessa Groundwater Replacement Program (OGWRP) ELC Improvement Construction Schedule (General)

Item	Task/Description	Year	2014												2015											
		Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	ELC Earthwork Zone 1																									
2	ELC Earthwork Zone 2																									
3	Lind Coulee Siphon No.2 Bid																									
4	Lind Coulee Siphon No.2 Construction																									
5	CO. Rd Bridge Design																									
6	CO. Rd Bridge Construction - Zone 1																									
7	LCWW Radial Gate Bid																									
8	LCWW Radial Gate Fabrication / Install																									
9	Lind Coulee Siphon No. 1 Bid																									
10	Lind Coulee Siphon No. 1 Construction																									

# ELC Improvements



# Workflow



## Delivery System Layout

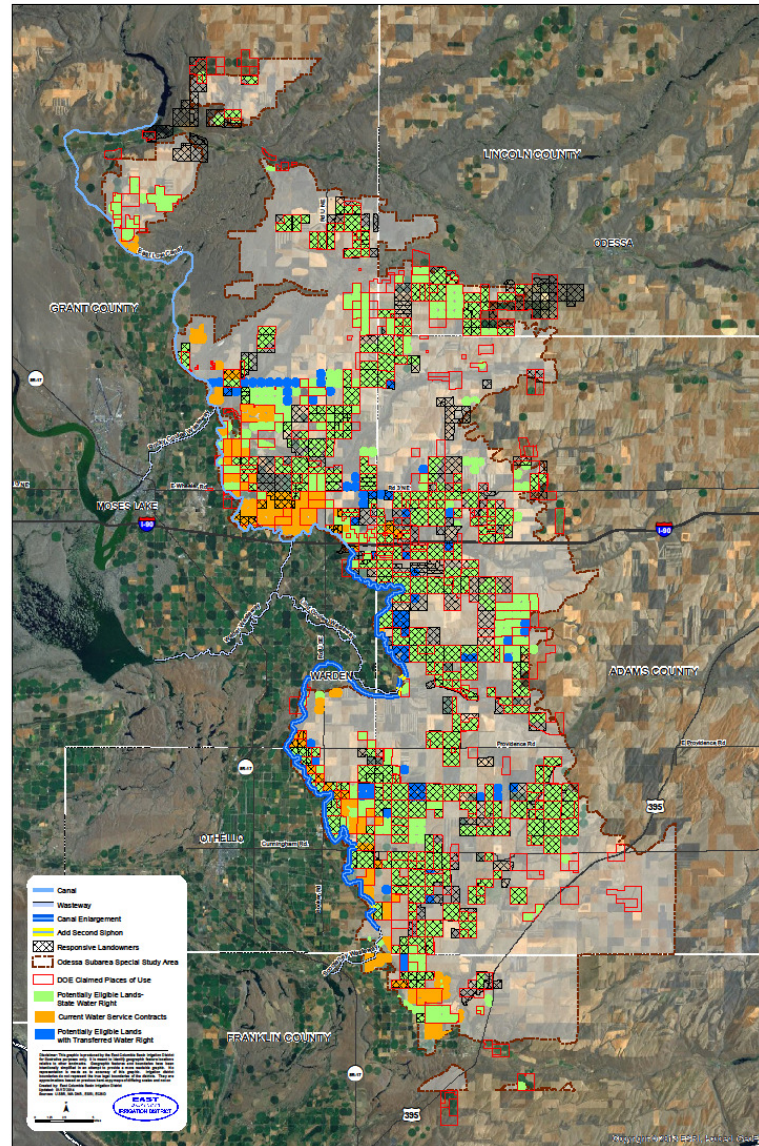


## **Determine Eligible & Interested (E&I) Landowners**

- Compilation of information (DOE, USBR, District).
- Verification of water rights, inclusion and interested Landowners.
- GIS and Data base to help identify, organize & layout E&I parcels.
- Cut-off Date for Responsive Landowners.

## **Delivery System Layout**

## Odessa Groundwater Replacement Program (OGWRP) Odessa Subarea Special Study Area



# Delivery System Layout

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## Preliminary Delivery System Layout

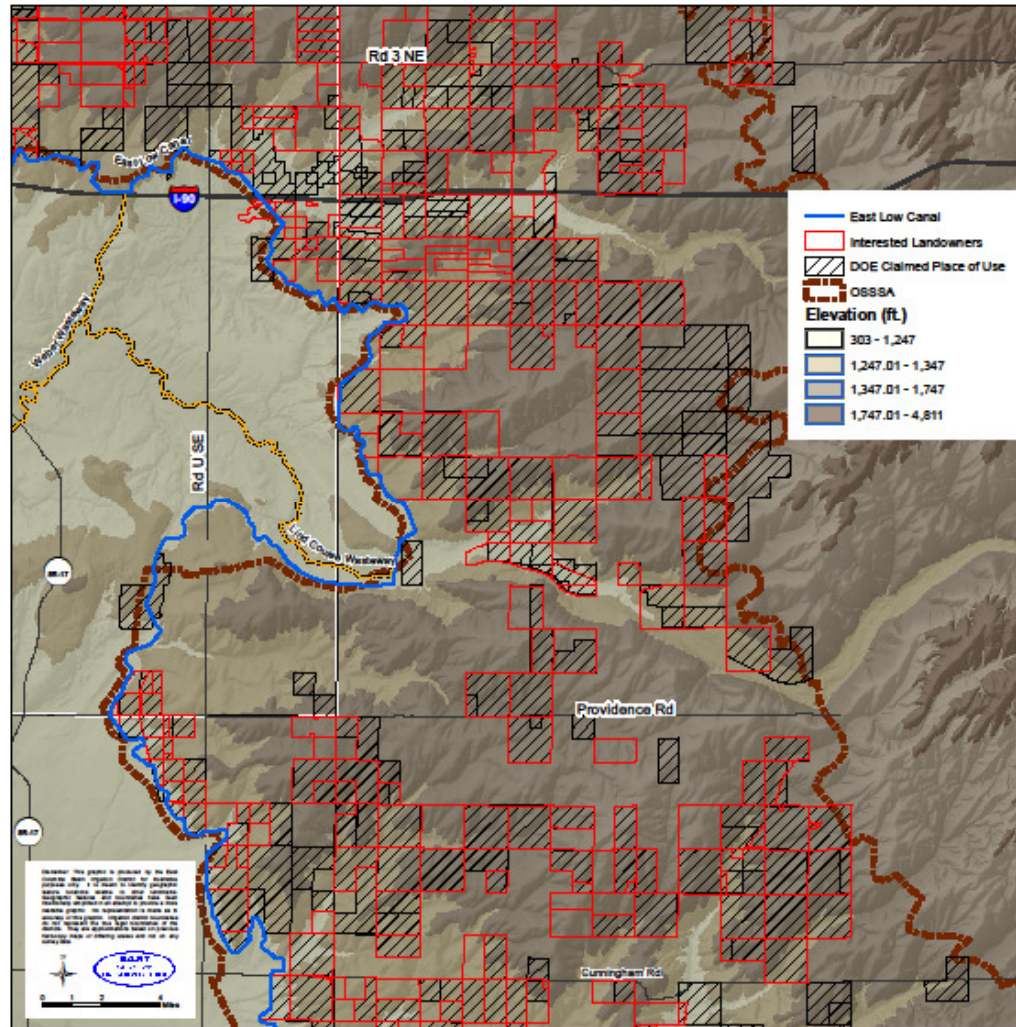
- Use established design parameters (EIS, psi, Q).
- Placement and Sizing of pumping plants / pipelines:
  - EPANET, WaterCAD™, Civil 3D™, ArcGIS 10.2™
- Estimated budget for systems.
- Comparison of different scenarios with design tools.
- Current funding covered under early action DOE Grant; additional funding will likely be required.

## Delivery System Layout



# GIS Tool

## Delivery System Layout



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## Feasibility / Verification

- Will scenario be reasonably financed (revenue bond or other mechanism)?
- Is the scenario feasible in terms of O&M?
- Is the scenario acceptable to the Landowners?
- Is the scenario acceptable to the Board of Directors?
- Updated cost range (\$/acre/yr) for a given term (yrs).

## Delivery System Layout

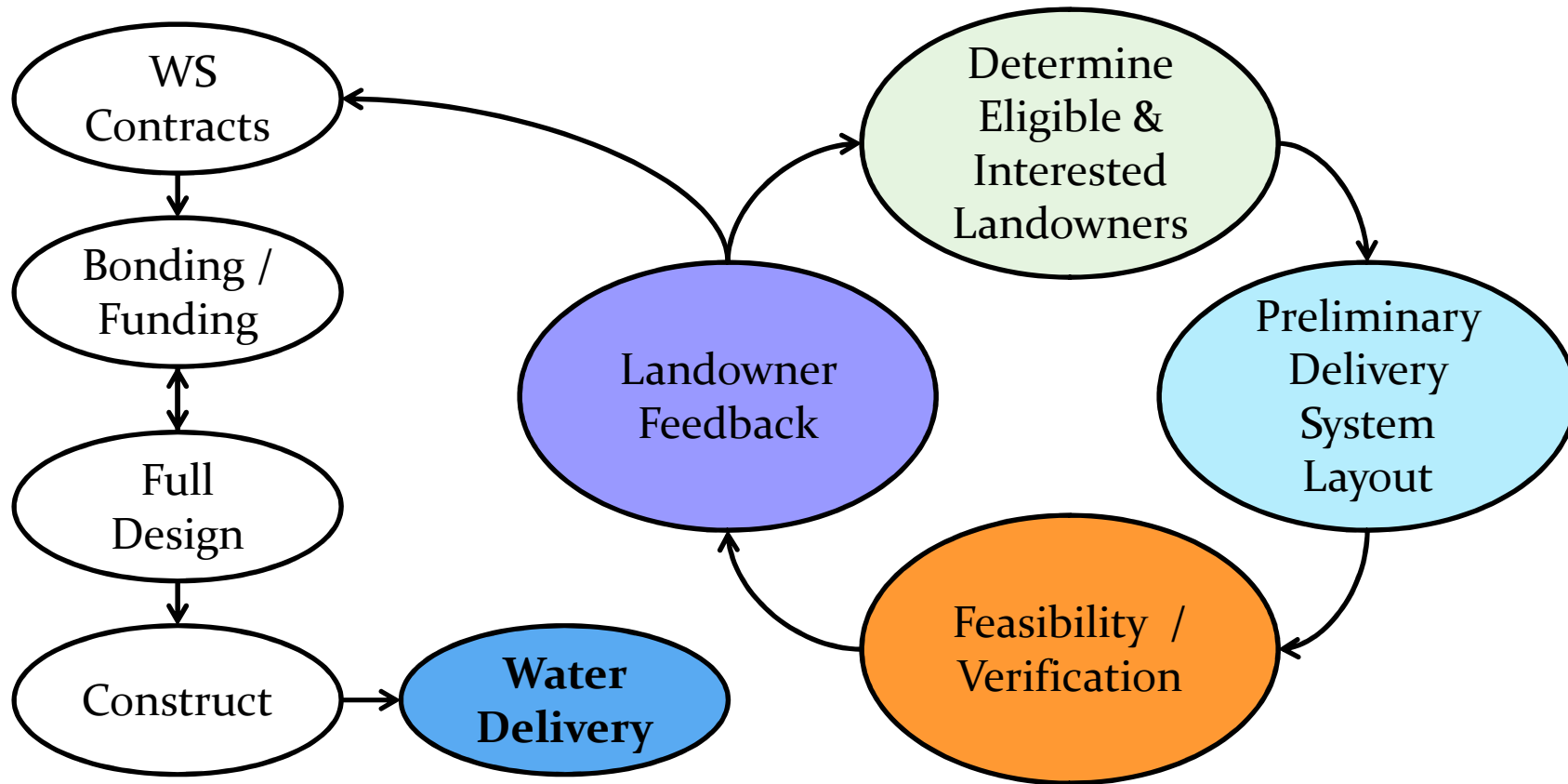


## Landowner Feedback

- Present results of preliminary design and feasibility.
- Landowner meetings and mailings.
- Window for landowner actions (infill, inclusion, etc.) and responses.
- Reassessment of Landowner interest / resulting acreage.
- Refine system layout and define acceptable alternatives.

## Delivery System Layout

# Layout Process Workflow to Water Delivery



## Delivery System Layout

## Capital Costs

- Costs to complete ELC improvements.
- Design / Construction of pumping plants and pipelines.
- Easement acquisitions.
- Power Transmission.
- (\$/acre/yr) for given term.



## Delivery System Costs



## **Operation and Maintenance Costs**

- Current O&M cost for District:  $\$58.62/\text{acre}/\text{yr}$
- WSCs pay 75% of this O&M cost

## **USBR Repayment Costs**

- Likely repayment for (1) 2nd Bacon Siphon Tunnel Complex , (2) Weber Siphons and (3) System Construction Repayment

## **TOTAL COST**

- Total cost ( $\$/\text{acre}/\text{yr}$ ) will include fixed costs for Capital and Repayment along with varying O&M costs.

# **Delivery System Costs**





## State, Federal and District Criteria

- State-issued ground water right permit or certificate (verified by Ecology).
- Land within the current Columbia Basin Project and Odessa Subarea Special Study Area boundaries.
- Irrigable land classification (USBR).
- Landowner must be legally able to enter into a WSC.

## Eligibility Criteria



## Department of Ecology (DOE) Criteria

- Valid water right certificate /permit.
- Eligible acreage tied water right certificate /permit.
- Ecology will issue a superseding permit identifying the well as standby-reserve.
- Monitoring system must be installed / maintained.

## Eligibility Criteria



## Department of Ecology (DOE) Criteria

- Does not include land in the acreage expansion program.
- Conservation Reserve Program (CRP) land with qualifying water right is eligible.
- Land covered under an Odessa Reserve Form submitted before April 2, 2013 is eligible.
- Expectation of water right transfers (to in-fill lands).
- Potential to split a state-issued groundwater right between applicable lands.

## Eligibility Criteria



- **US Bureau of Reclamation Criteria**

- Land must be included within the Columbia Basin Project and Odessa Subarea Special Study Area boundaries.
- Irrigable land classification.
- Subject to RRA requirements (960 acres of Class 1 equivalent land).

## Eligibility Criteria

## • District Criteria

- Water Service Contract must be signed between District and individual Landowner.



- Ability and willingness to pay O&M and repayment costs.
- Monitoring system to ensure compliance with Contract and project requirements.

## Eligibility Criteria





## **New Water Service Contracts (WSC)**

- WSC between Landowner & District.
- Necessary to secure financing (e.g. Revenue Bonds).
- Likely 3 types of WSC depending on water supply.

## **Current WSC**

- 190, 290 and 390 WSCs.

## **Master WSC**

- Between USBR & District to deliver Federal water.

# **Contracts**



## Secondary-Use Permit

- Reclamation has applied to DOE for a secondary-use permit to access water from storage certificate.
- Likely to be issued in the coming months.

## Superseding Permits

- DOE Agency Action.
- Example of this process established with 390 Contracts for Coordinated Conservation Plan water.

## Contracts /Permits



## District / USBR Ownership Discussion

- District ownership of delivery system may have benefits for future bonding collateral.
- Reserved power benefits for District owned facilities
- Reserved transmission space for pumping plants.
- RRA in effect – Federal water.
- Potential benefits for future Cultural Resources.
- Ease/cost of easement acquisition.

## Infrastructure Ownership



## Priorities

- Eligibility Criteria MOU between Reclamation, DOE and District.
- Continuation of Delivery System Workflow for preliminary Layout/ Design/ Cost.
- Complete ELC improvements with available funding.
- Secure funding or finance remaining ELC improvements.
- Follow-up Landowner meeting in Spring 2014.

## Way Forward



# Thank You!

- East Columbia Basin Irrigation District:  
(509) 488-9671 [ljohnson@ecbid.org](mailto:ljohnson@ecbid.org)
  - USBR Odessa documents:  
[http://www.usbr.gov/pn/programs/ucao\\_misc/odessa/](http://www.usbr.gov/pn/programs/ucao_misc/odessa/)
  - DOE Office of the Columbia River (OCR):  
[www.ecy.wa.gov/programs/wr/cwp/crwmp.html](http://www.ecy.wa.gov/programs/wr/cwp/crwmp.html)
  - Additional CBP Development info. from the Columbia Basin Development League:  
[www.cbdl.org](http://www.cbdl.org)
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## Discussion & Questions