

# Umatilla Recharge Project



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**Update to CTUIR  
2 December 2008**

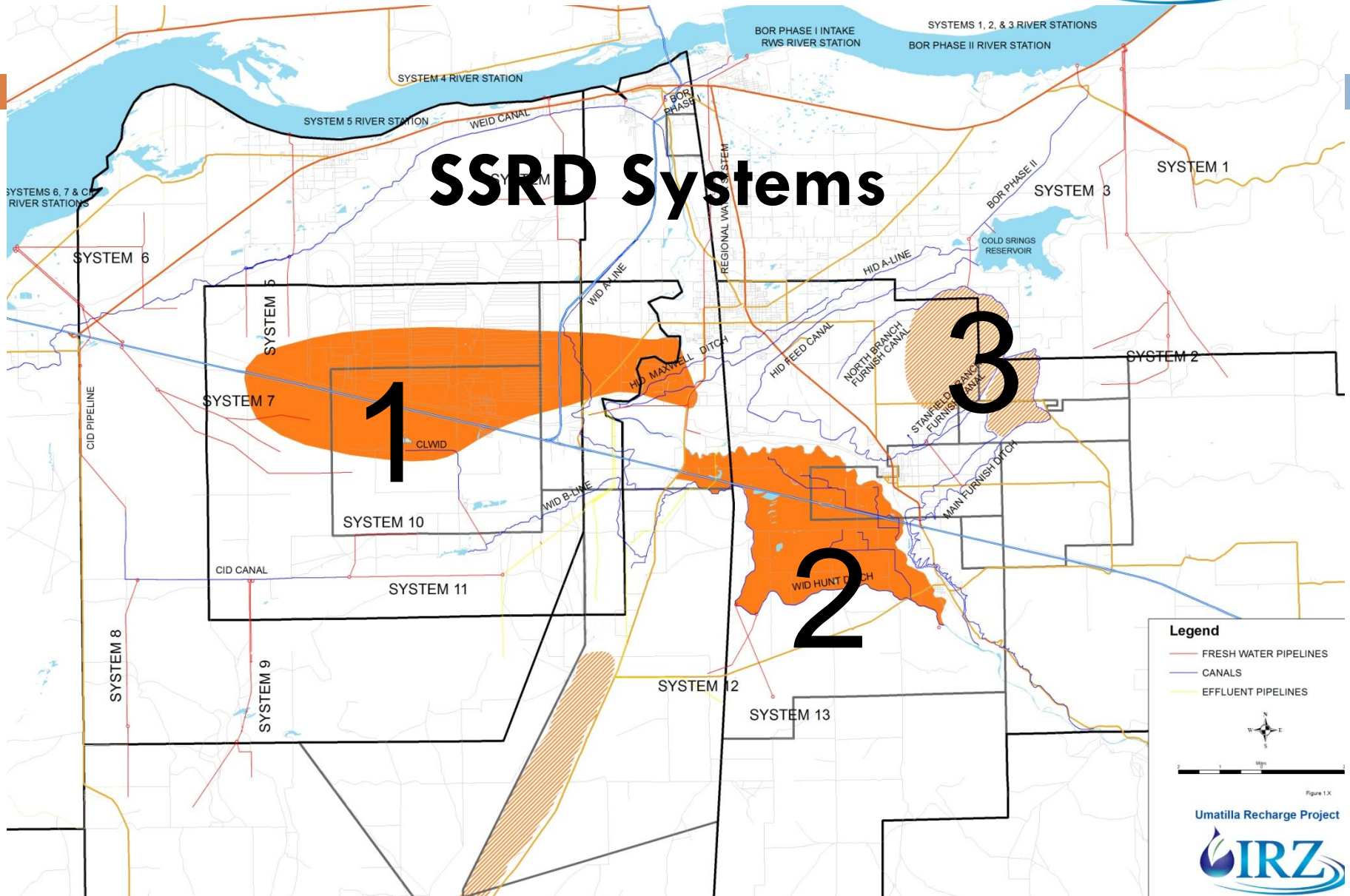
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## Agenda

- Three Supply, Storage, Recovery, & Distribution (SSRD) systems
- Focus on SSRD 1 – “County Line”
- Next steps

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**Legend**

- FRESH WATER PIPELINES
- CANALS
- EFFLUENT PIPELINES

Figure 1.X

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## SSRD 1 – Full Supply Need

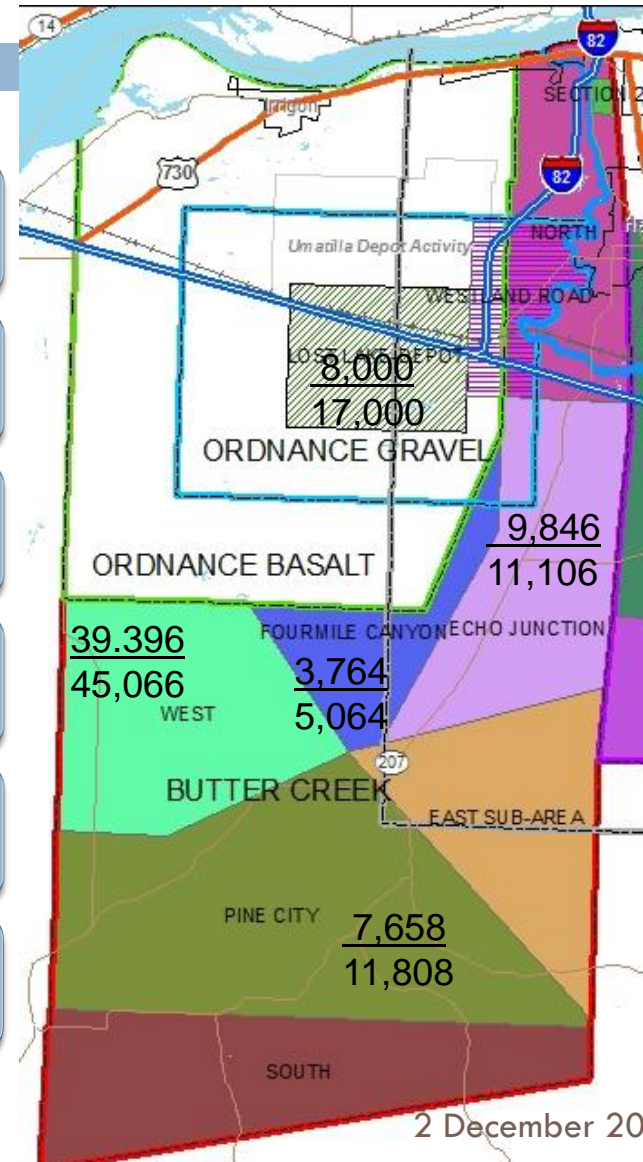
IR Need = 68,664 AFY

10% Bas Aq = 6,166 AFY

Exempt wells = 1,000 AFY

Umat Flow Aug = 24,000 AFY

**Total Target = 99,830 AFY**



## **SSRD 1 – Beneficiaries Based on AF**

- Irrigation: Approx. 69%
- Aquifer replenishment: Approx. 6%
- Domestic use: Approx. 1%
- Umatilla flow augmentation: Approx. 24%
- Groundwater quality improvement



## **SSRD 1 – Assumed System Sizes**

- First increment – 25 kAFY: CID or BTF systems
- Maximize each existing system
  - ❑ CID: 55 kAFY
  - ❑ BTF: 45 kAFY
- Maximum need – 100 kAFY: CID+BTF systems

## **Seven Engineering Options**

## SSRD 1 – Nature of Cost Estimates

Concept-level design → Concept-level \$\$

Supply+Storage  
Cost \$\$

+

Recovery+Distribution  
Cost \$\$

**= Total Cost**



## **SSRD 1 – Key Assumptions**

- 90-day withdrawal from Columbia River
- 365-day recovery and distribution
- Pipeline alignment
- Injection in existing basalt wells
- Flow apportionment

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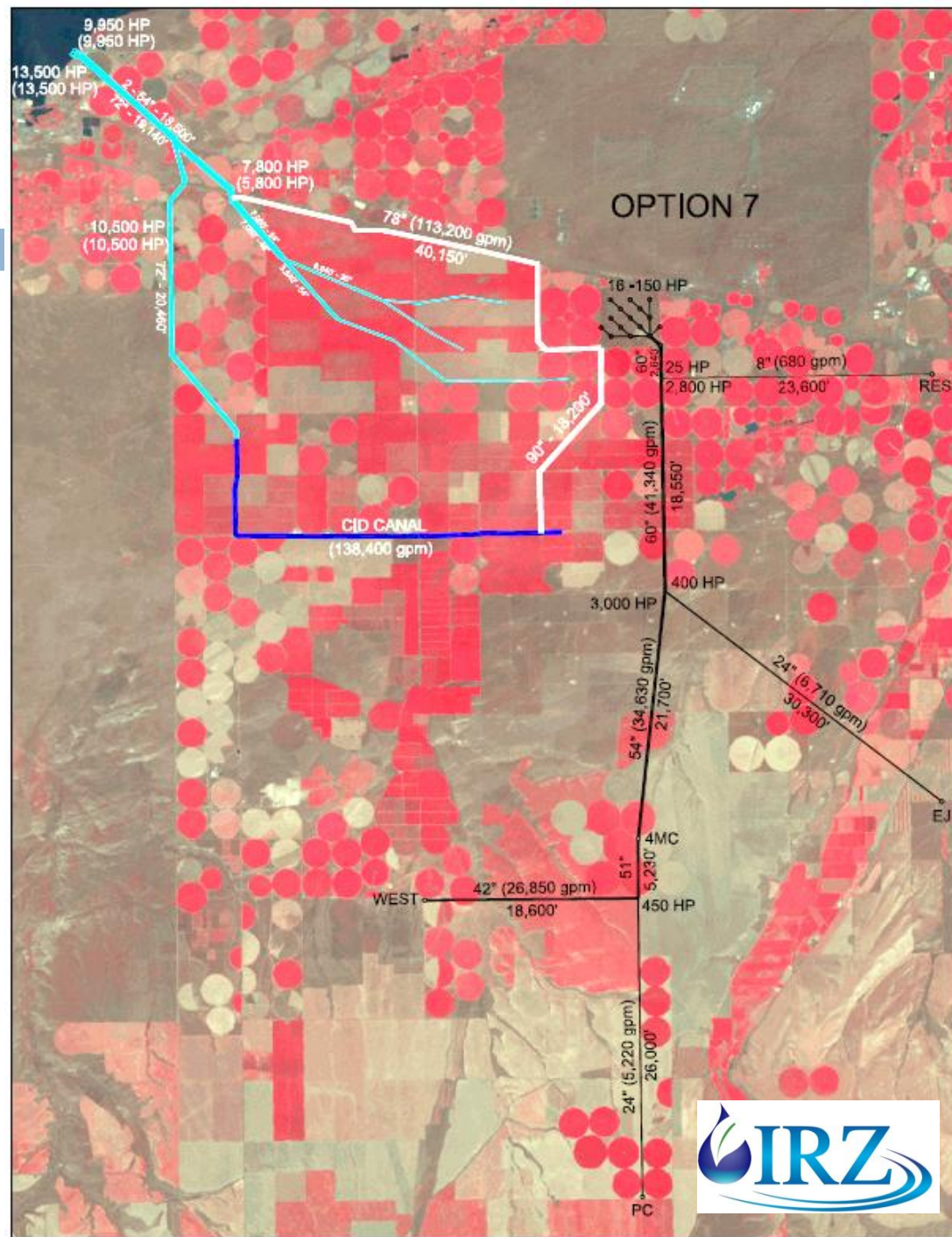
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## SSRD 1 Option 7

**CID+BTF**

**Supply/Storage:  
100 kAFY**

**Recovery/  
Distribution:  
68 kAFY**



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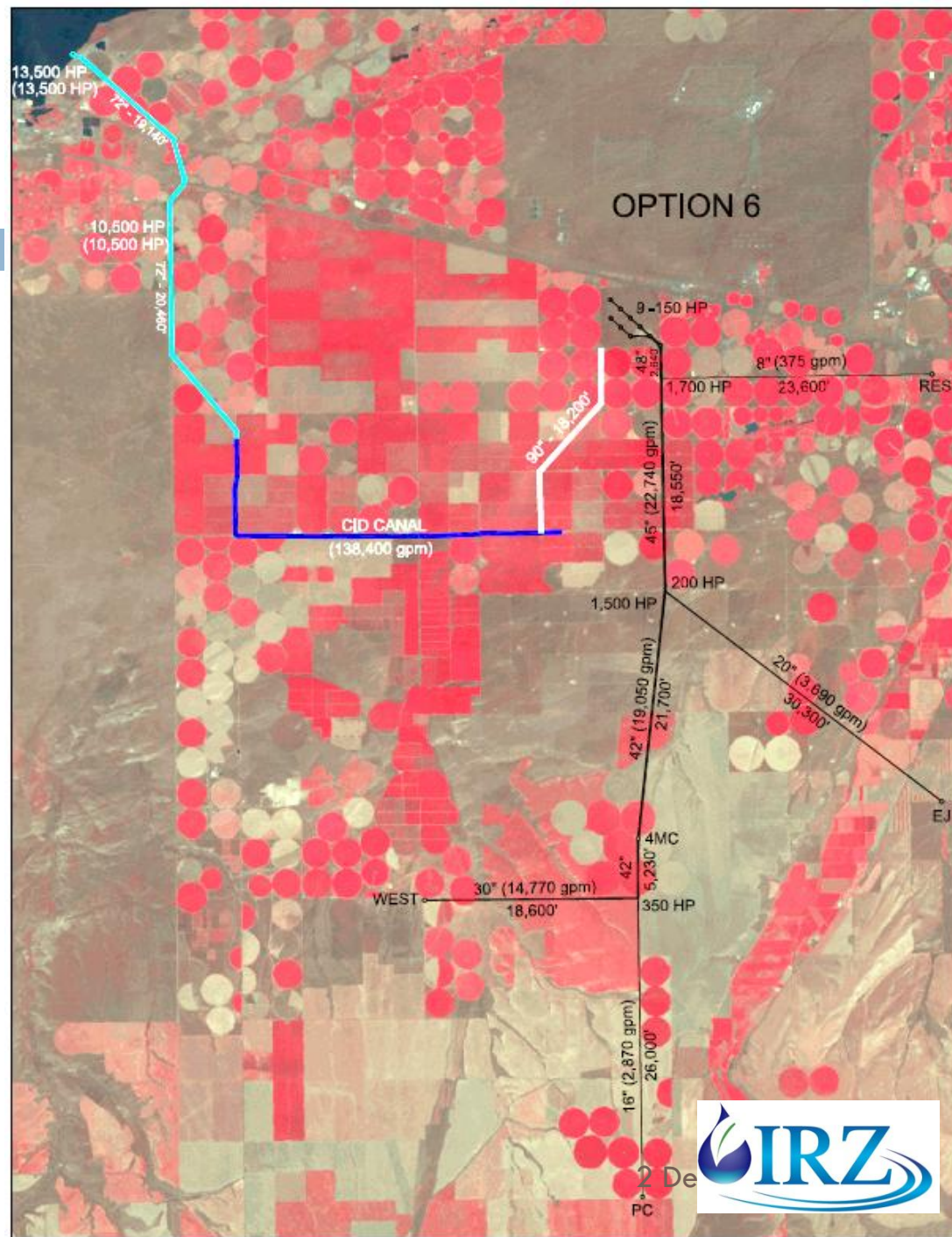
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## SSRD 1 Option 6

**CID System**

**Supply/Storage:  
55 kAFY**

**Recovery/  
Distribution:  
37 kAFY**



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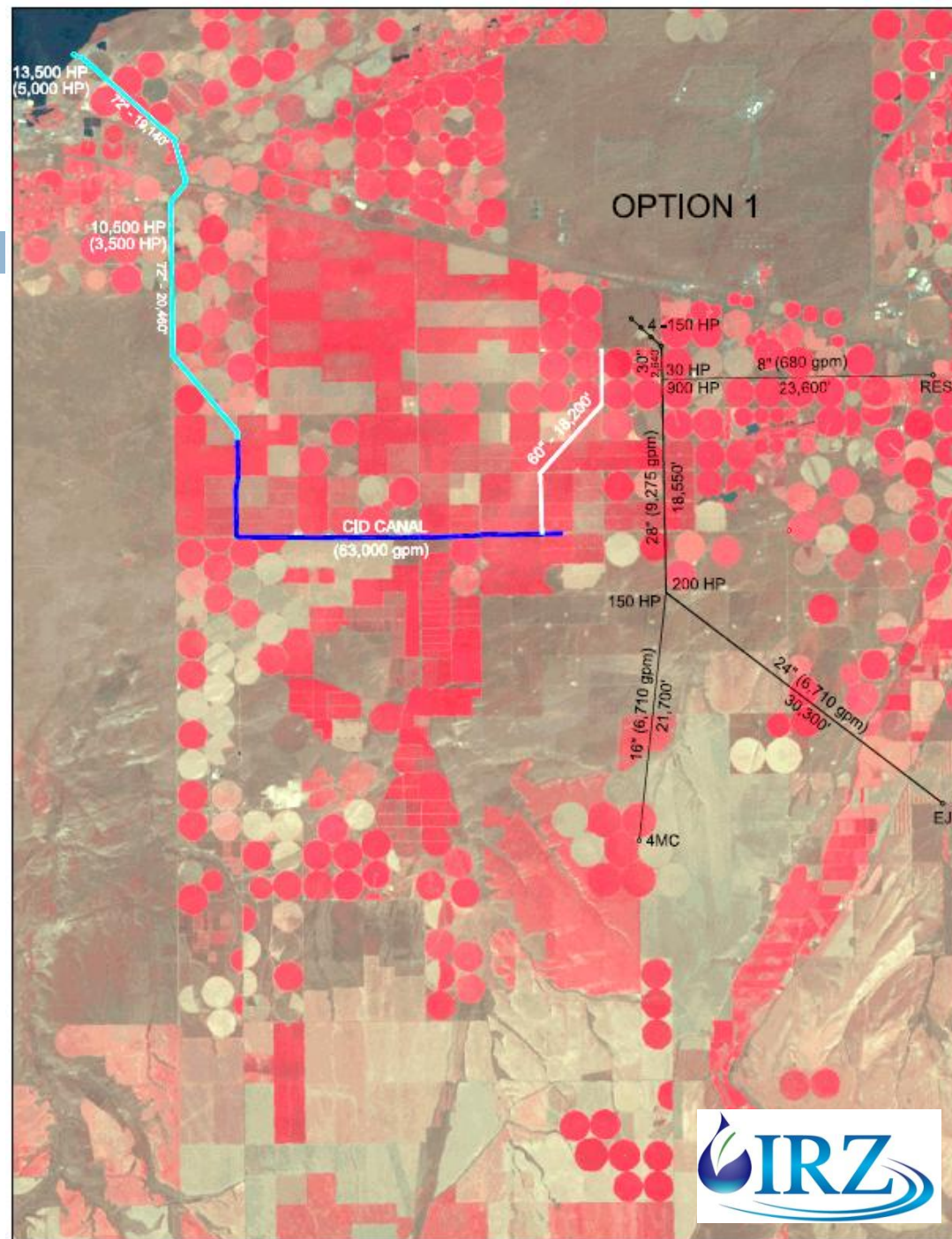
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## SSRD 1 Option 1

**CID System**

**Supply/Storage:  
25 kAFY**

**Recovery/  
Distribution: 16  
kAFY**



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## SSRD 1 – Cost Summary Table\* **DRAFT**

Option	Size	System		Supply/Storage (million \$)	Recovery/Distribution (million \$)	Total (million \$)
1	25kAFY	CID	Cap	12	10	22
			O&M	1.5	1	2.5
2						
3						
4						
5						
6	55kAFY	CID	Cap	17	25	42
			O&M	3.2	2	5.2
7	100kAFY	CID+BTF	Cap	56	44	100
			O&M	5	4	9

\* Cost subject to change following further discussions

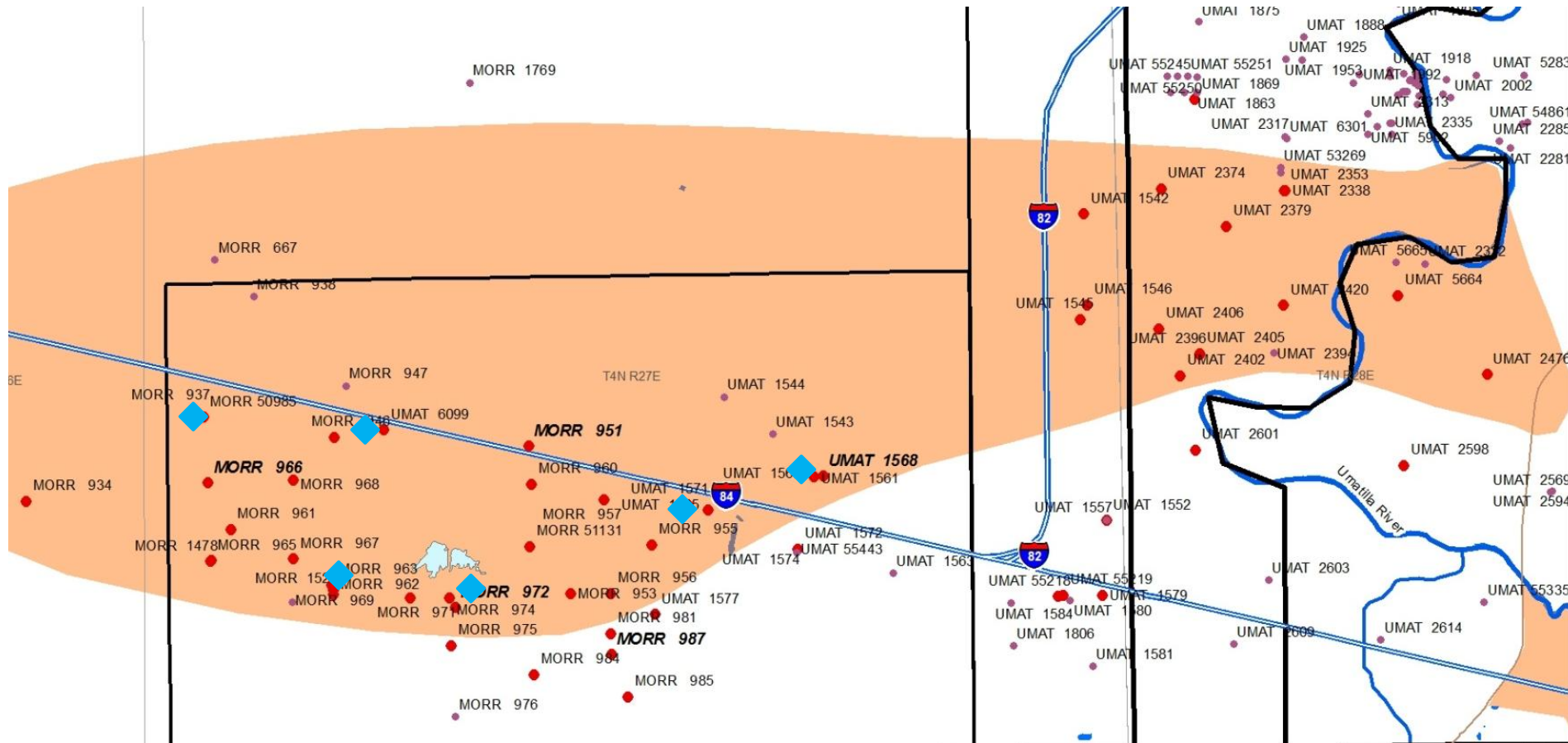
## Other Updates

- Other activities
- Next key steps/Milestones:
  - Conceptual alluvial hydrogeology - Feb 09
  - Regulatory pathway- Jan 09
  - Economic benefits assessment – Feb 09
- Project completion - Jun 09
- 2009 Legislation

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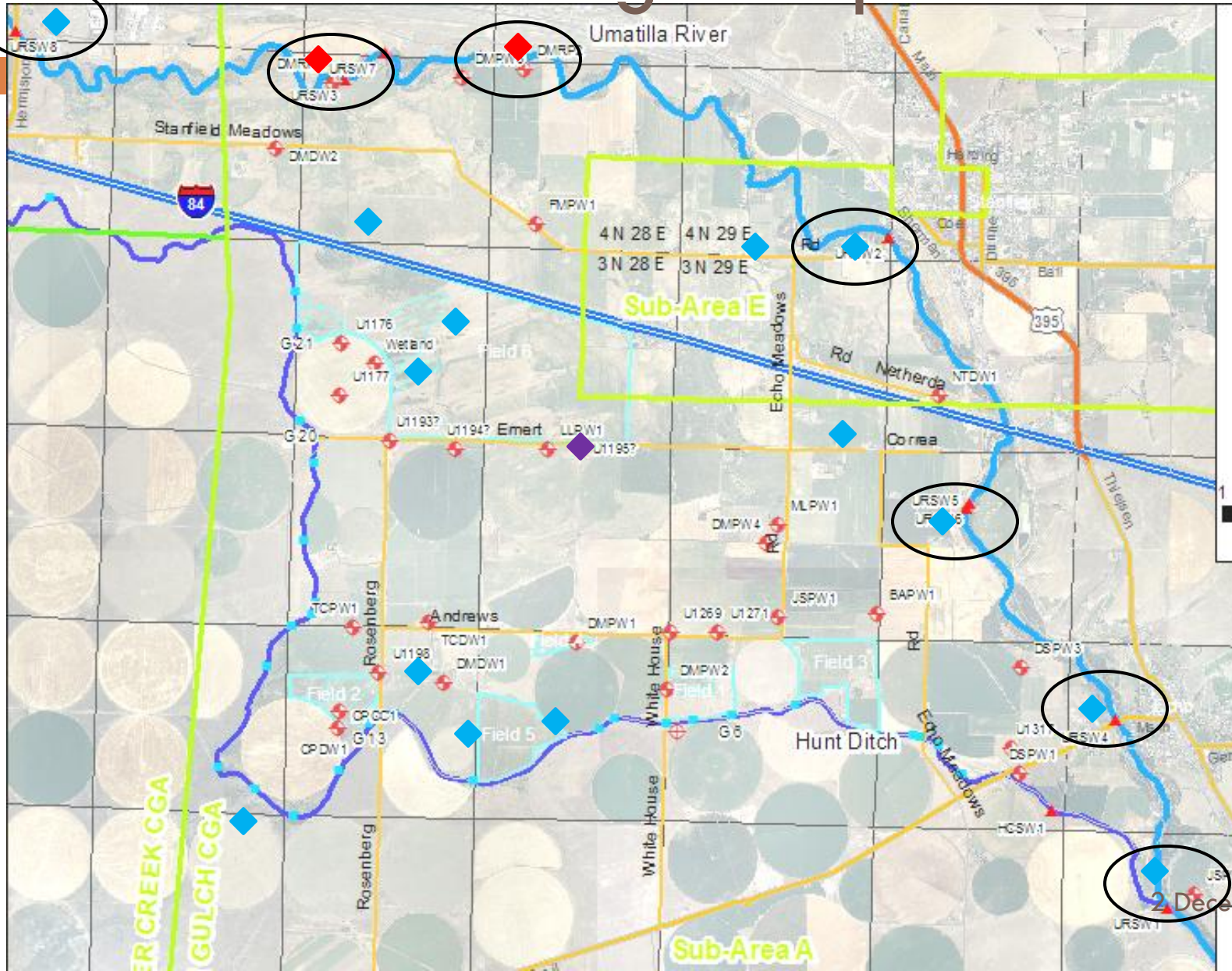


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**Questions?**