



# ESPA Managed Recharge Update

Water Supply Committee Meeting

Wesley Hipke  
January 15, 2016



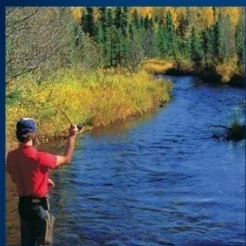
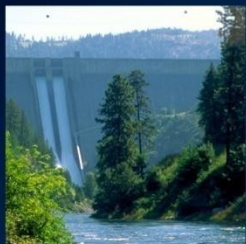


## IWRB ESPA Managed Recharge – Lower Valley

### • Recharge Summary

- Recharge Right in Priority: Oct 23rd – present
- Recharge Rate (as of Jan 12<sup>th</sup>) = 247 cfs
- Total Recharged (as of Jan 12<sup>th</sup>) = 25,871 af \*

\*Preliminary Data





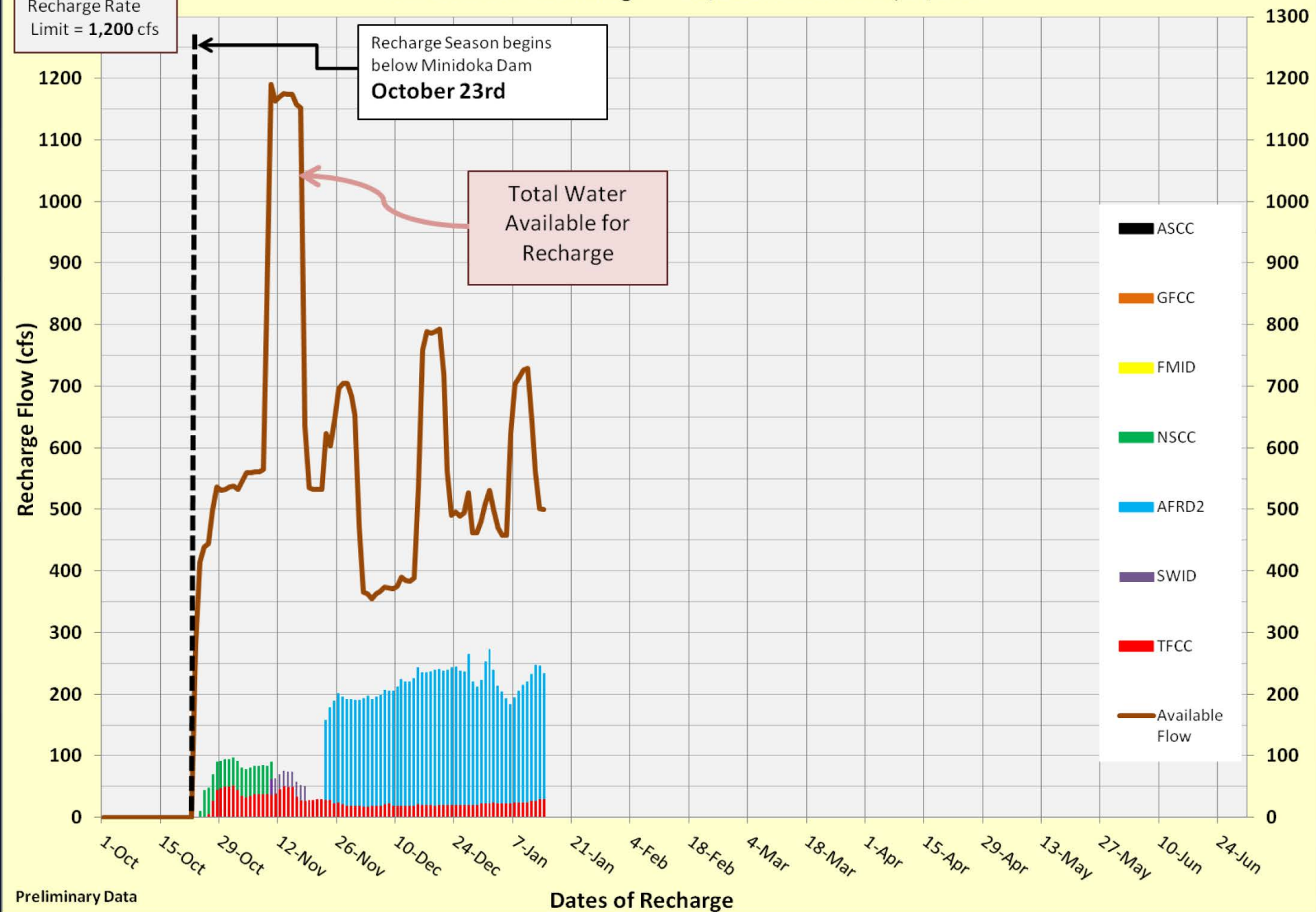
# Total IWRB Managed Recharge Rates During 2015 - 2016 Season

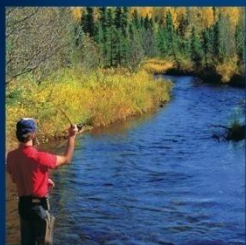
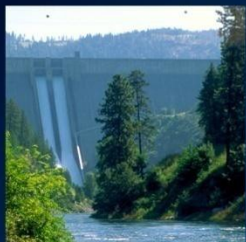
Total Volume of Recharge = **26,819** af as of January 14, 2016

Recharge Rate  
Limit = **1,200** cfs

Recharge Season begins  
below Minidoka Dam  
**October 23rd**

Total Water  
Available for  
Recharge





## ESPA Managed Recharge Summary

Oct. 23<sup>rd</sup>, 2015 – Jan. 12<sup>th</sup>, 2016

ESPA Area	Canal System	5-Year Retention Time (%)	Mean Recharge Rate (cfs)	Days Recharged	Volume Recharged (Acre-feet)
<b>Lower Valley</b>	American Falls Reservoir District No. 2 (Milner-Gooding Canal)	~36	195	53	20,539
	North Side Canal Company	~37	42	18	1,482
	Southwest Irrigation District	~54	25	9	1,339
	Twin Falls Canal Company	~45	27	81	4,352
<b>TOTAL</b>					<b>26,819</b>

\*Preliminary Data



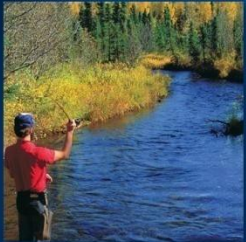
## ESPA Managed Recharge Expansion Projects

### • Lower Valley

- Infrastructure improvements for winter-time deliveries
- Maximize existing recharge facilities
- Development of new recharge facilities

### • Upper Valley

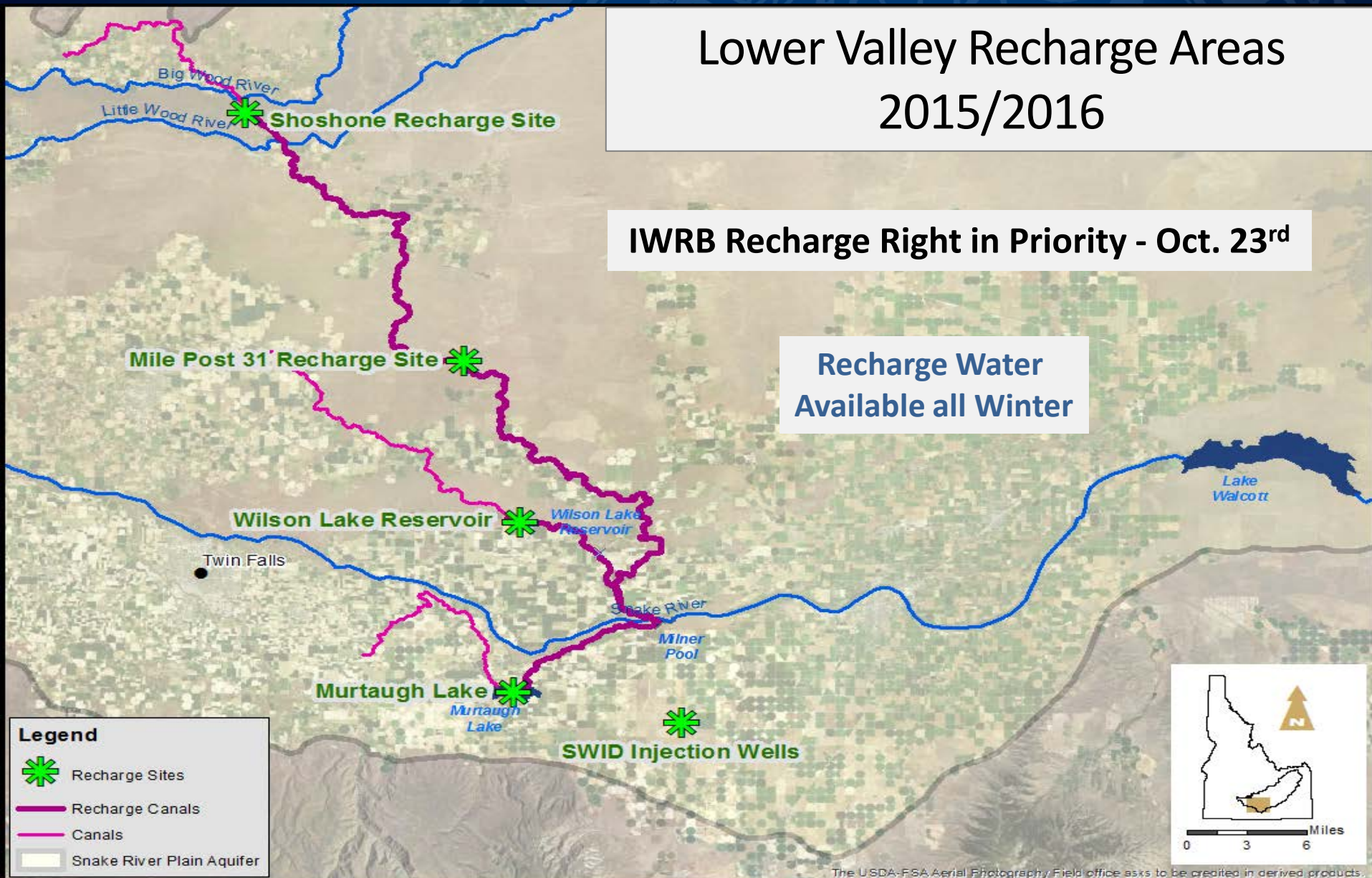
- Infrastructure improvements to facilitate highly variable availability of recharge timing and volumes
- Maximize/Improve existing recharge facilities
- Development of new recharge facilities



## Lower Valley Recharge Areas 2015/2016

IWRB Recharge Right in Priority - Oct. 23<sup>rd</sup>

Recharge Water  
Available all Winter





## Lower Valley Recharge 2015/2016 AFRD2 Milner-Gooding Canal

**IWRB Managed Recharge  
Started Nov. 23<sup>rd</sup> 2015**

**Big Wood – Dry Bed  
Capacity ~ 70 cfs**

**Capacity ~ 300 cfs**

**Shoshone Recharge Site**

Shoshone Concrete Flume Repair

▲ Dietrich Drop Hydro Plant

**Capacity ~ 250 cfs**

**MP 31 Recharge Site**

MP 28 - Hydro Plant Bypass

Wilson Lake  
Reservoir

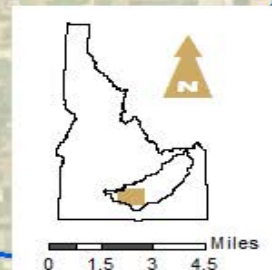
Milner  
Pool

### LEGEND

- ▲ Study
- Capacity Improvement Projects
- ✱ Recharge Sites

### Canal Road Improvements

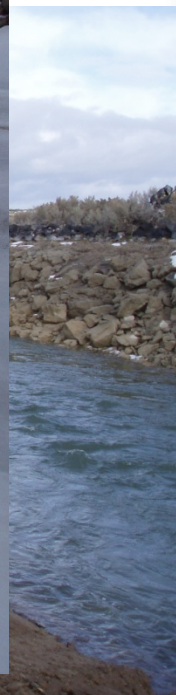
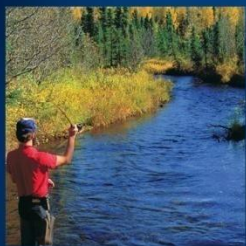
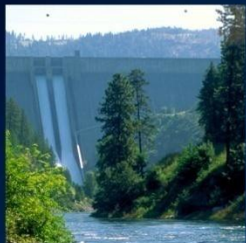
- MP31 to Shoshone
- Milner to MP31 (complete)
- Milner Gooding Canal





## AFRD2 Managed Recharge Expansion Projects

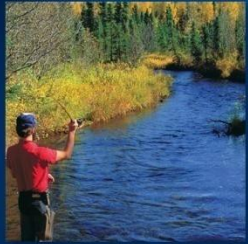
- **MP 28 Hydro Plant Bypass – Completed Nov 20<sup>th</sup>**





## AFRD2 Managed Recharge Expansion Projects

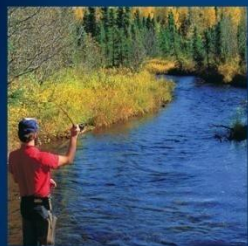
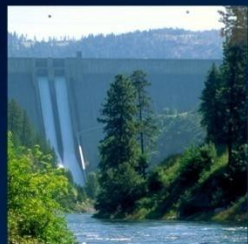
- **MP 31 Recharge Site**





## AFRD2 Managed Recharge Expansion Projects

- Concrete Flume





# North Side Canal Potential Improvements

**Wilson Lake  
Hydro Plant**

*Wilson Lake  
Reservoir*

**Capacity ~ 130 cfs**  
Ch2M Study 2015

**Hazelton B  
Hydro Plant**

**Hazelton A  
Hydro Plant**

**C Canal**

**By-Pass  
Hydro Plant**

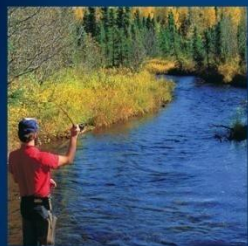
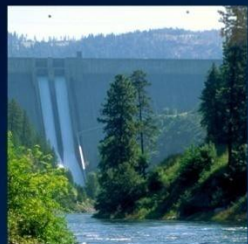
**IWRB Managed Recharge**  
**Oct. 23<sup>rd</sup> to Nov. 10<sup>th</sup>**

**Avg. 42 cfs**

**Resume Recharge**  
**~ Feb. 1<sup>st</sup>**

*Snake River*  
*Milner Pool*





## NSCC Managed Recharge Projects

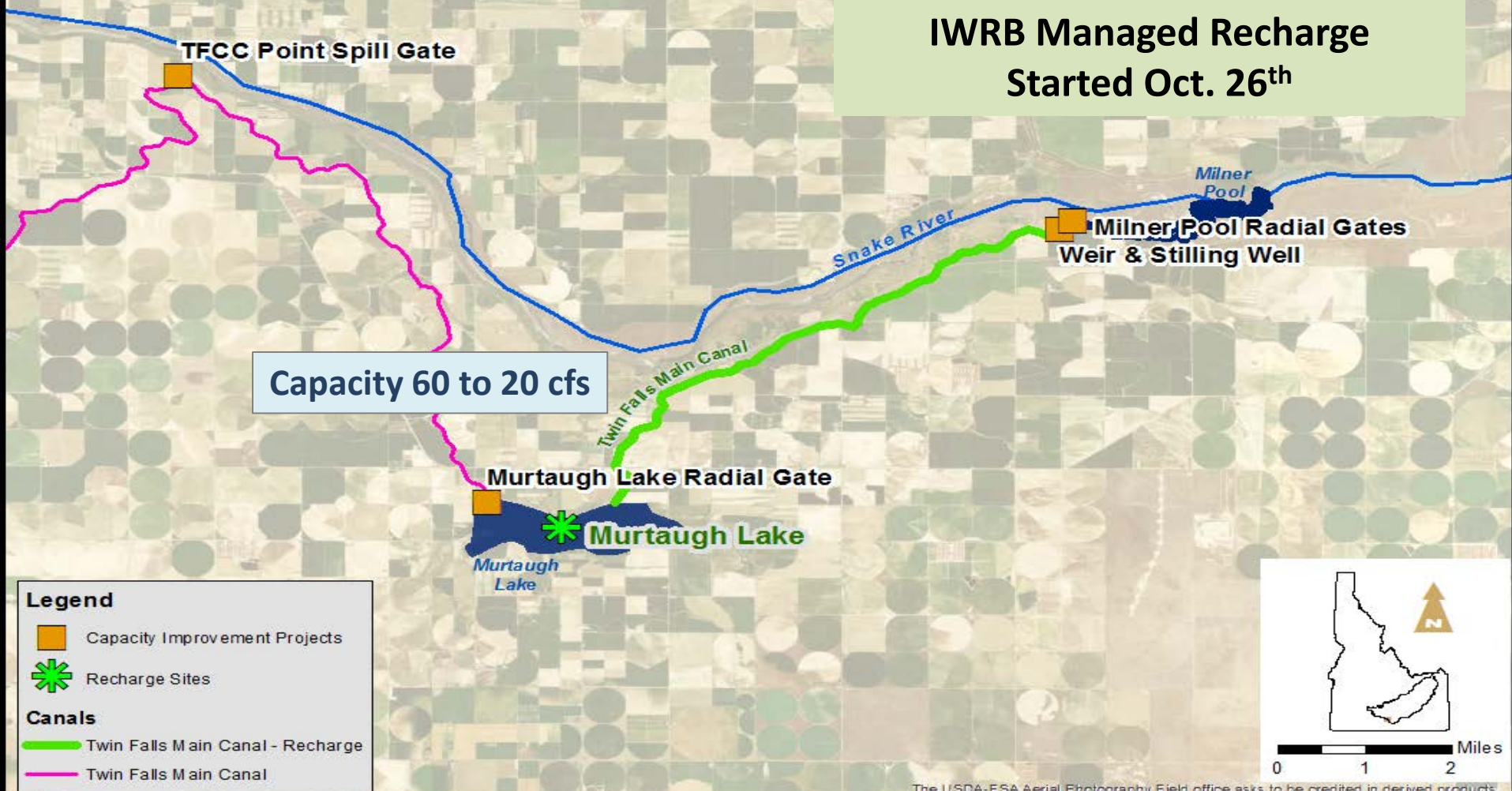
- North Side Canal / Wilson Lake



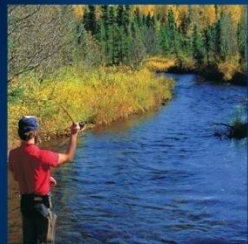
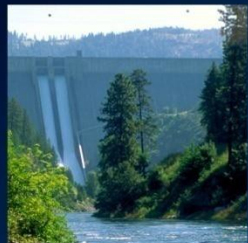


## Lower Valley Recharge 2015/2016 Twin Falls Canal

**IWRB Managed Recharge  
Started Oct. 26<sup>th</sup>**







## TFCC Managed Recharge Expansion Projects

- Twin Falls Canal / Murtuagh Lake



November 30

January 6<sup>th</sup>

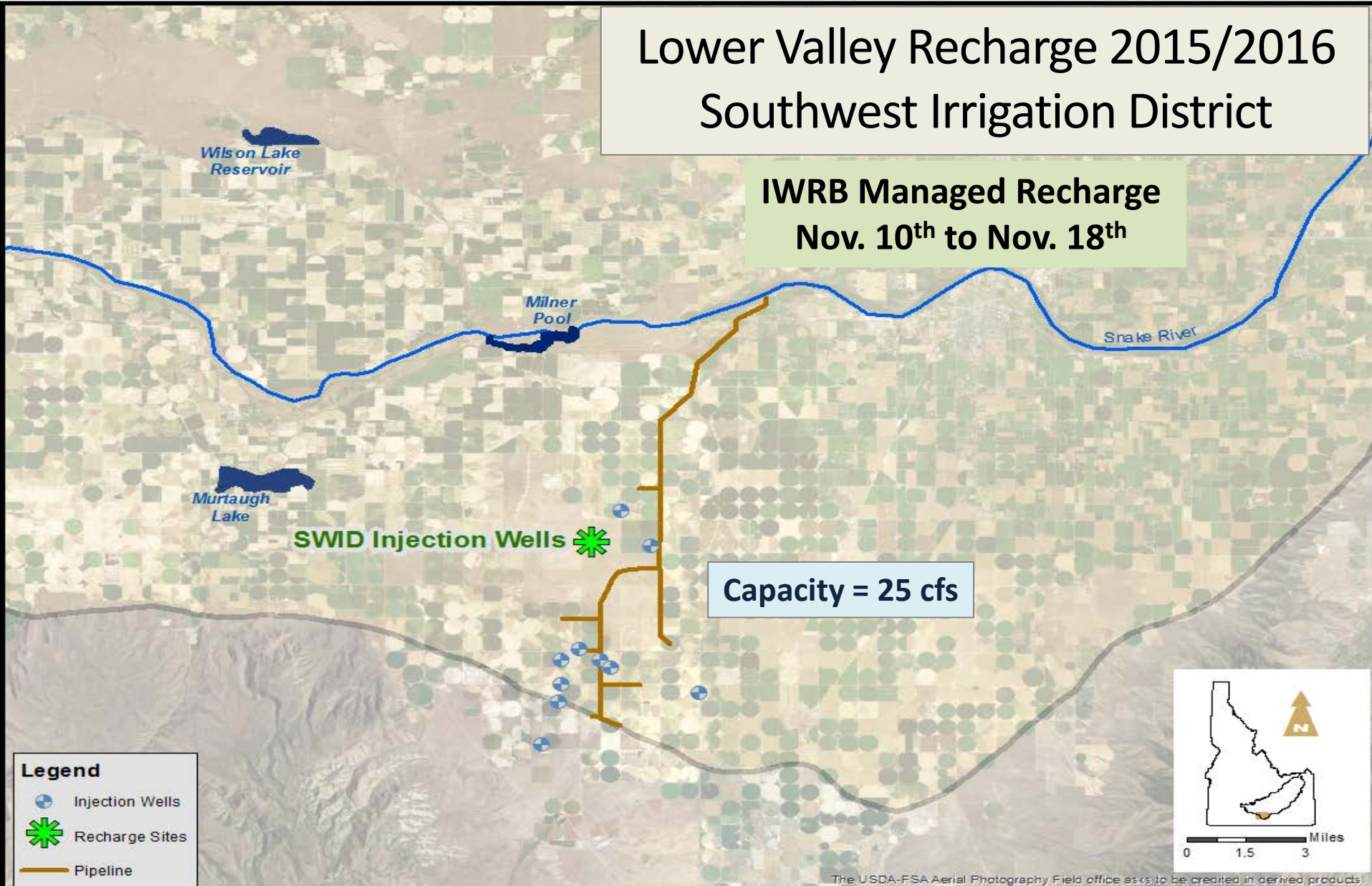


11/30/2015



## Lower Valley Recharge 2015/2016 Southwest Irrigation District

IWRB Managed Recharge  
Nov. 10<sup>th</sup> to Nov. 18<sup>th</sup>



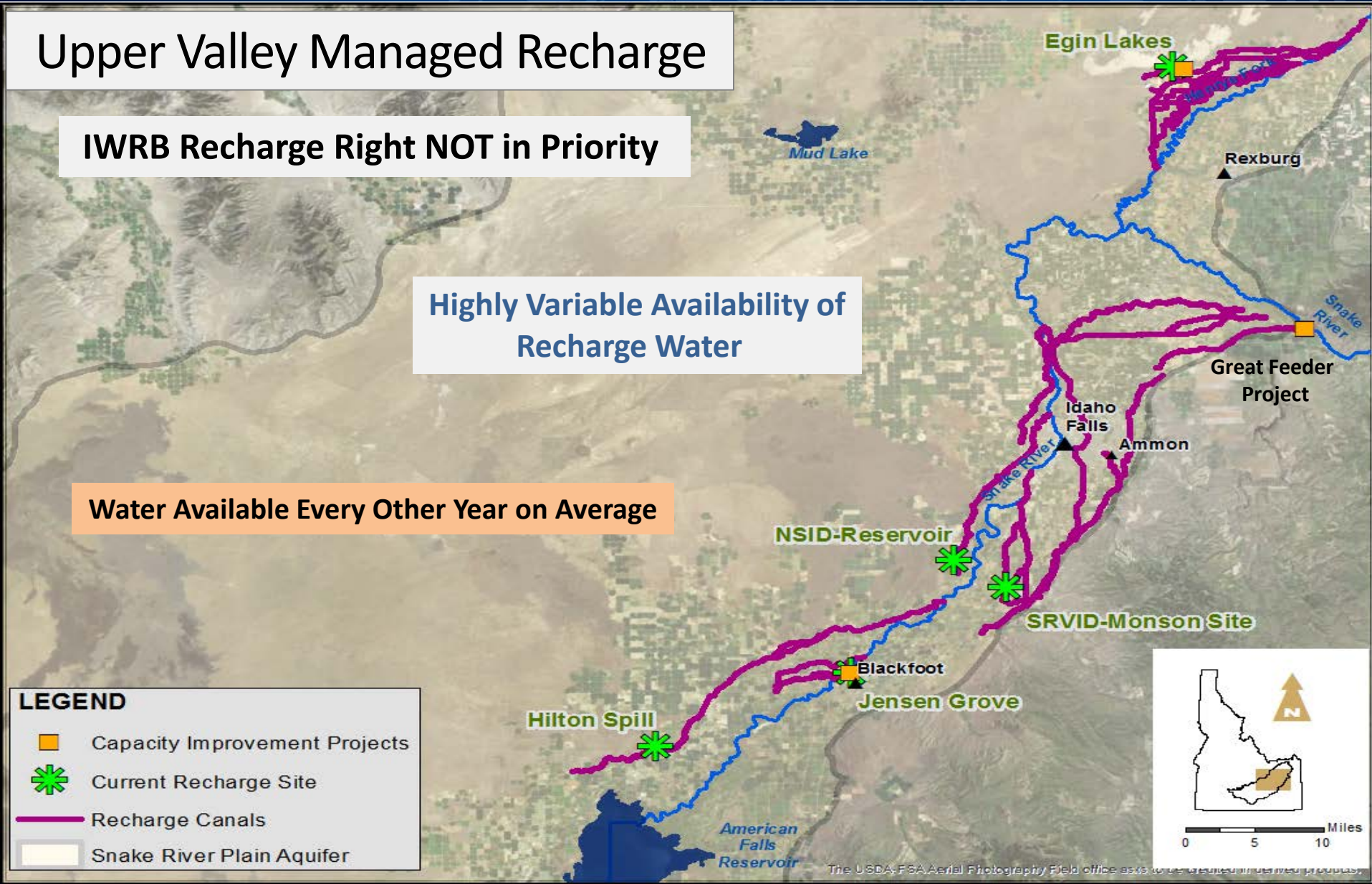


## Upper Valley Managed Recharge

IWRB Recharge Right NOT in Priority

Highly Variable Availability of Recharge Water

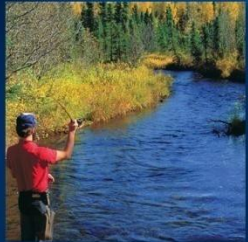
Water Available Every Other Year on Average





## Egin Lakes Managed Recharge Project

- **New Recharge Canal**

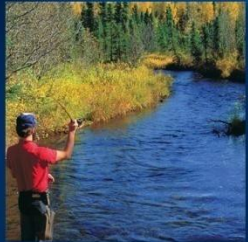


November

January 8<sup>th</sup>

December 14<sup>th</sup>





## Great Feeder Improvement Project

- New Recharge Canal



November 23<sup>rd</sup>



November 23<sup>rd</sup>



## ESPA Managed Recharge Capacity

### • Lower Valley

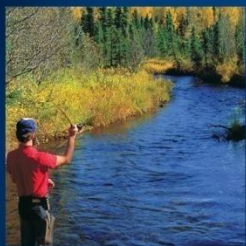
#### • Winter Time Capacity

- |             |         |
|-------------|---------|
| • 2014/2015 | 190 cfs |
| • 2015/2016 | 270 cfs |
| • 2016/2017 | 570 cfs |

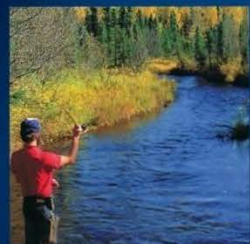
### • Upper Valley

#### • Off-Canal Capacity

- |             |         |
|-------------|---------|
| • 2014/2015 | 200 cfs |
| • 2015/2016 | 400 cfs |
| • 2016/2017 | 500 cfs |



# Questions



Mile Post 31 recharge basin on April 8<sup>th</sup>, 2013.