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Water Resource Board

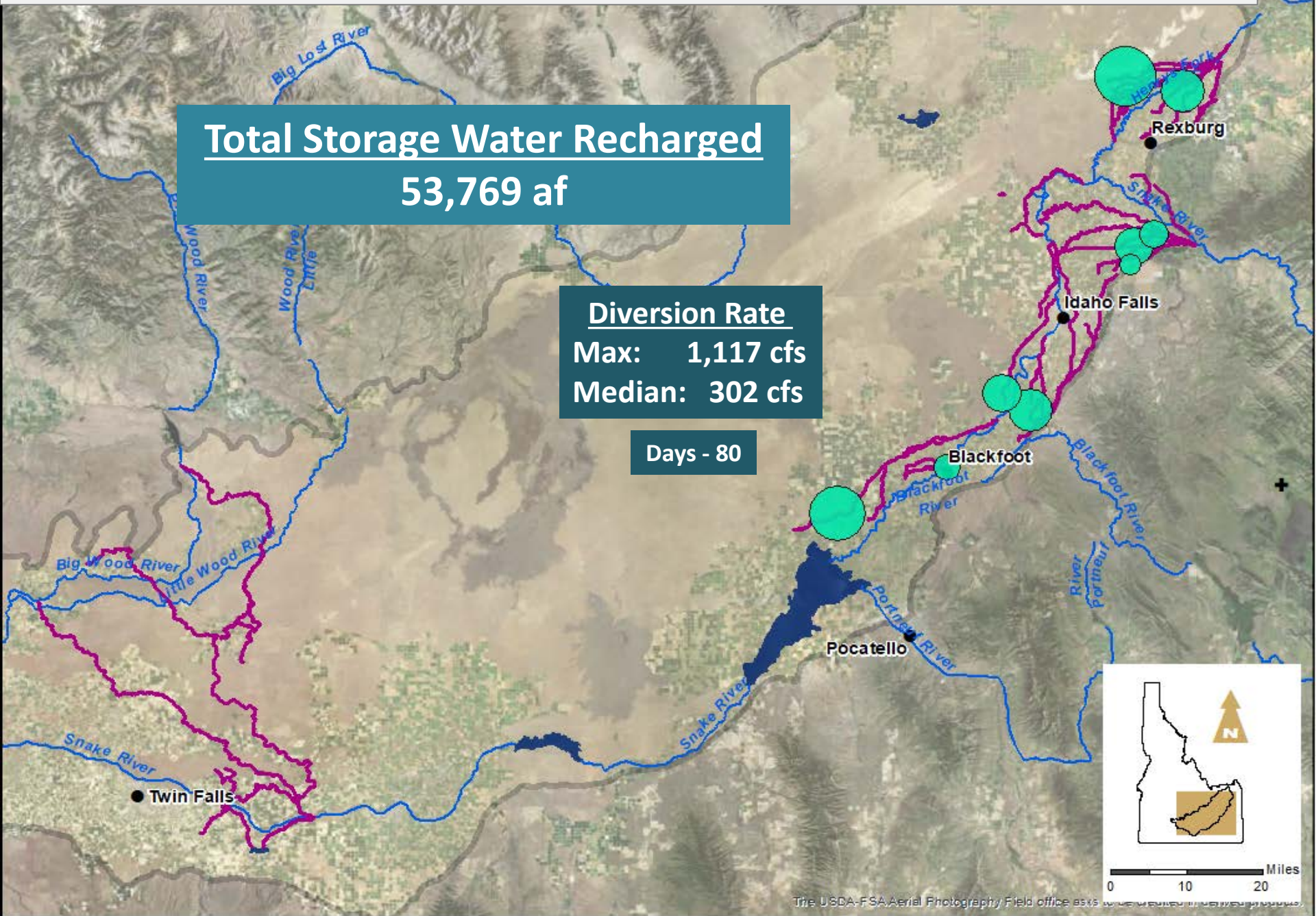
ESPA Managed Recharge Program Update

IWRB Work Session

Wesley Hipke
IWRB Recharge Program Manager

September 19, 2019

IWRB Managed Recharge for SWC Agreements – 2018/2019



Total Storage Water Recharged

53,769 af

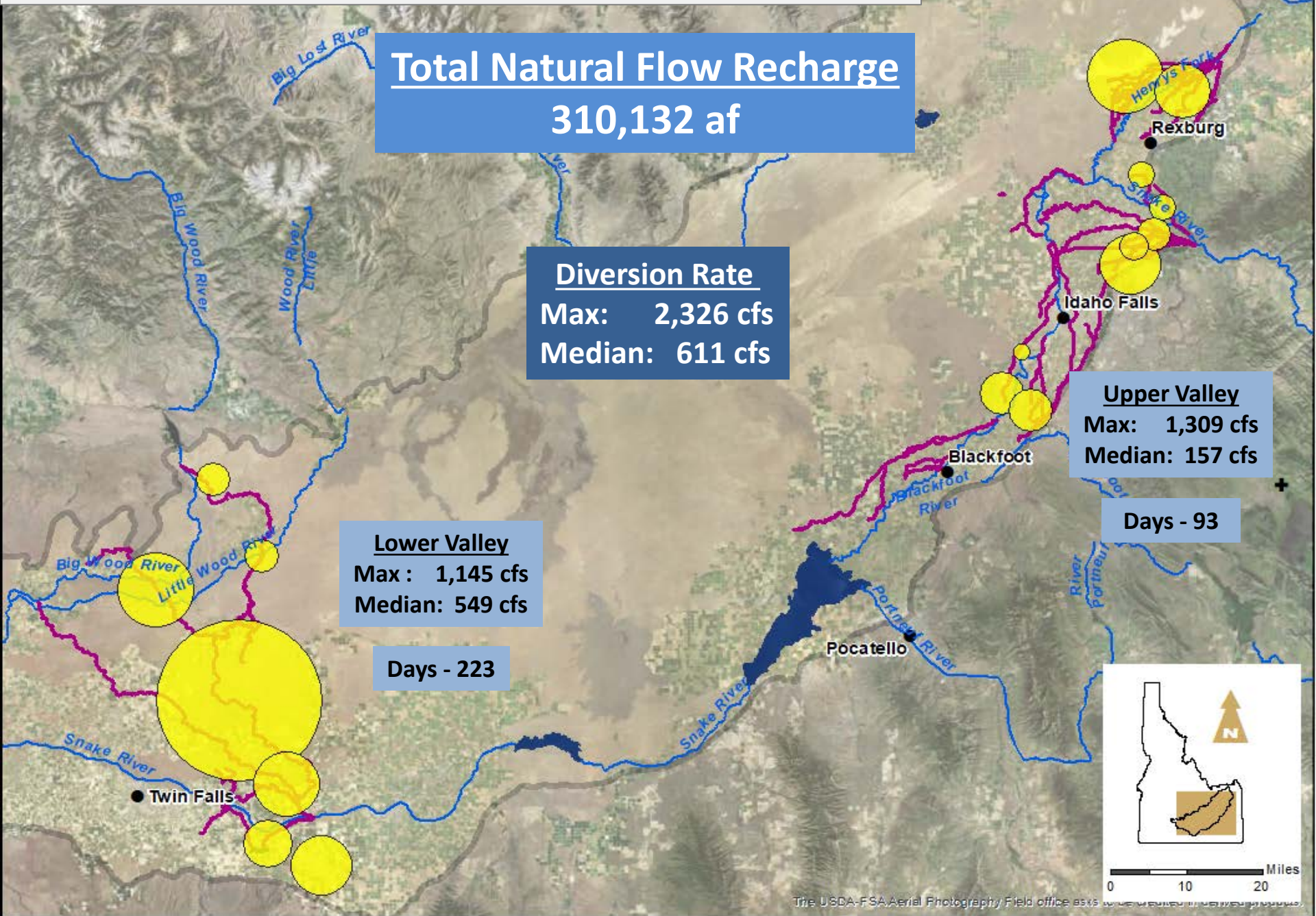
Diversion Rate

Max: 1,117 cfs

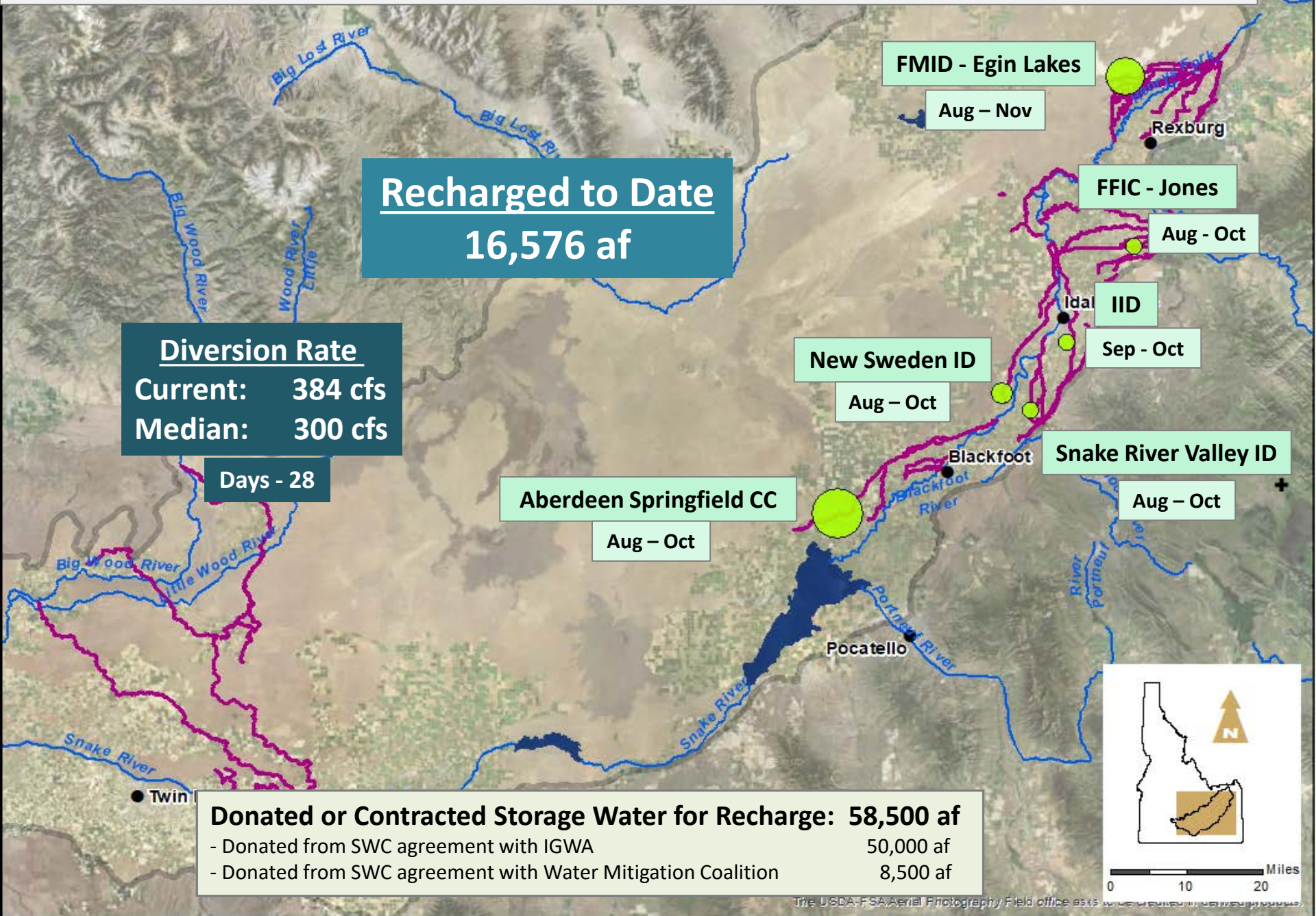
Median: 302 cfs

Days - 80

IWRB ESPA Managed Recharge – 2018/2019



IWRB Managed Recharge for SWC Agreements – Fall 2019



Recharged to Date
16,576 af

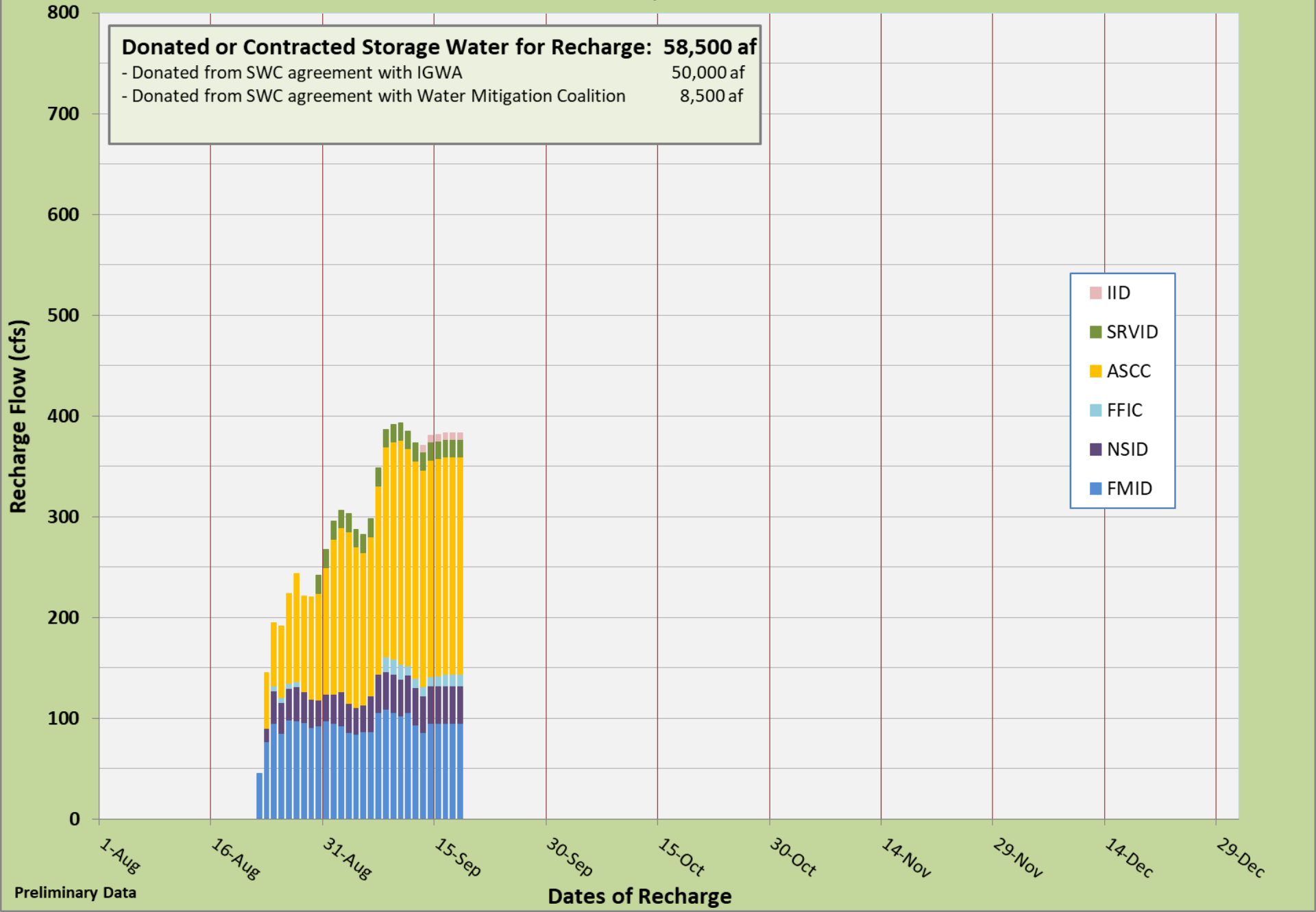
Diversion Rate
Current: 384 cfs
Median: 300 cfs
Days - 28

Donated or Contracted Storage Water for Recharge: 58,500 af

- Donated from SWC agreement with IGWA	50,000 af
- Donated from SWC agreement with Water Mitigation Coalition	8,500 af

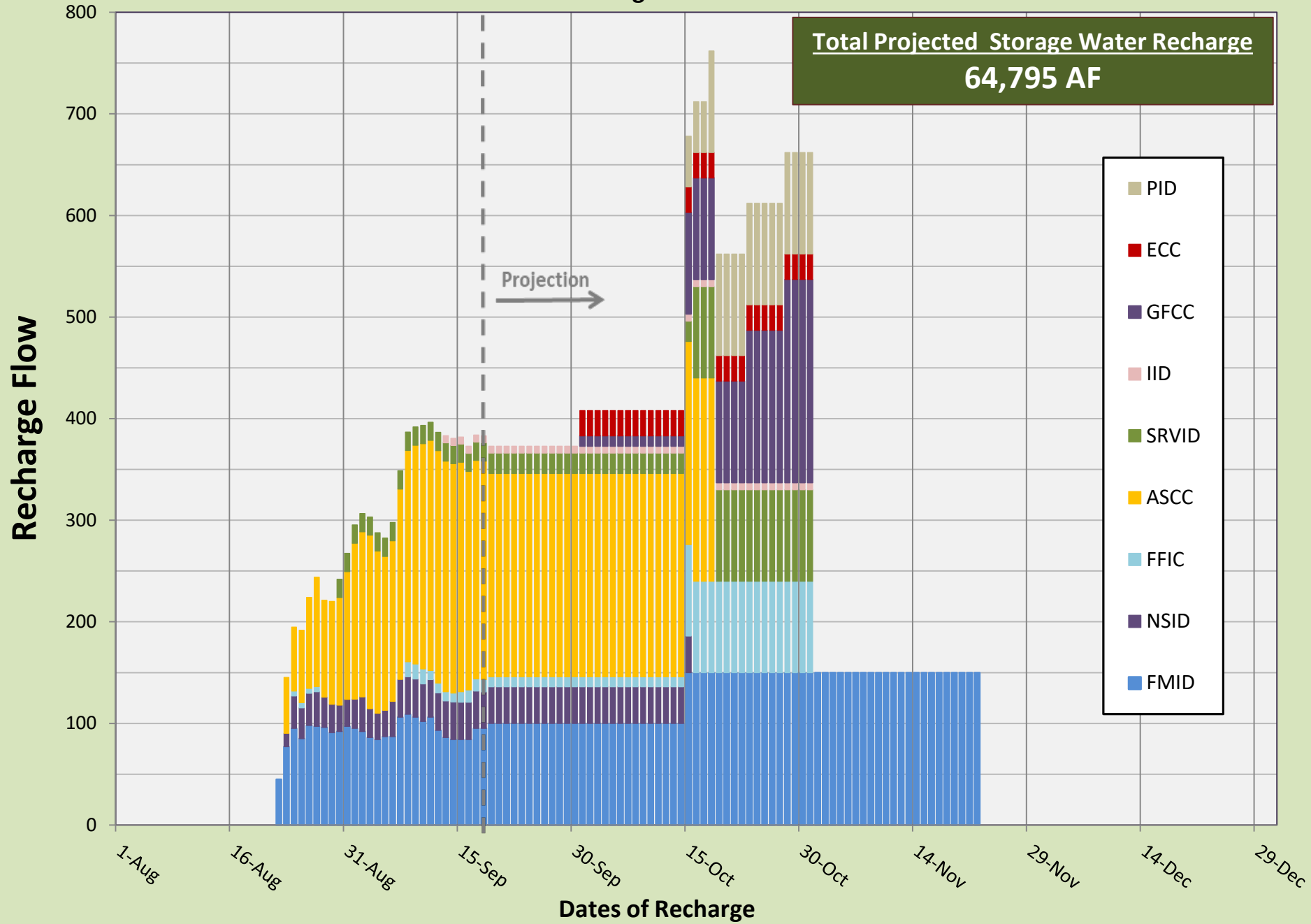
Storage Water - IWRB Recharge for SWC Aggrements - Fall 2019

Total Volume of Recharge = **16,525** af (August 22, 2018 to September 18, 2019)



Projected Storage Water - IWRB Recharge for SWC Aggrements - Fall 2019

Aug 22 to Nov 22



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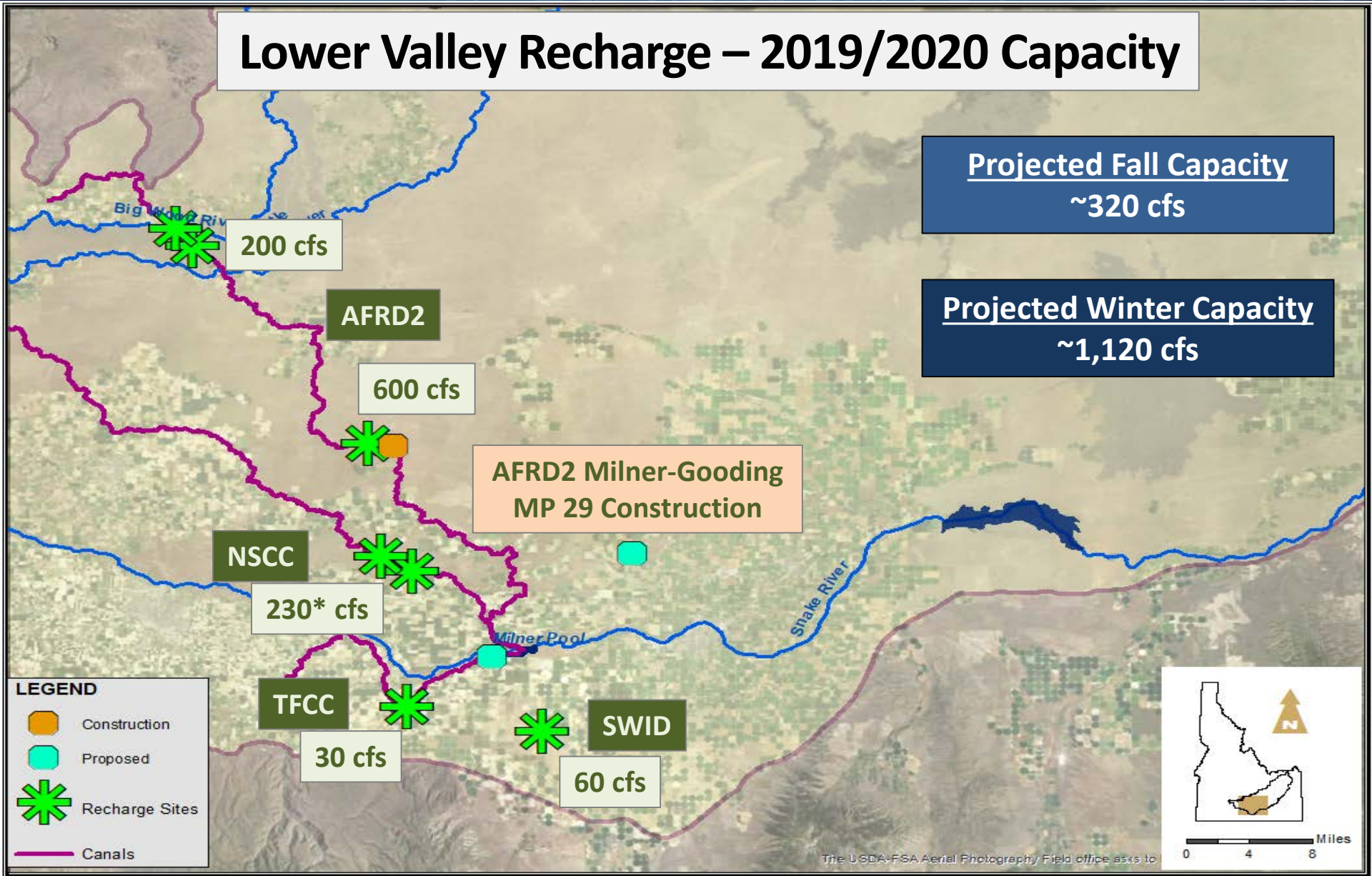
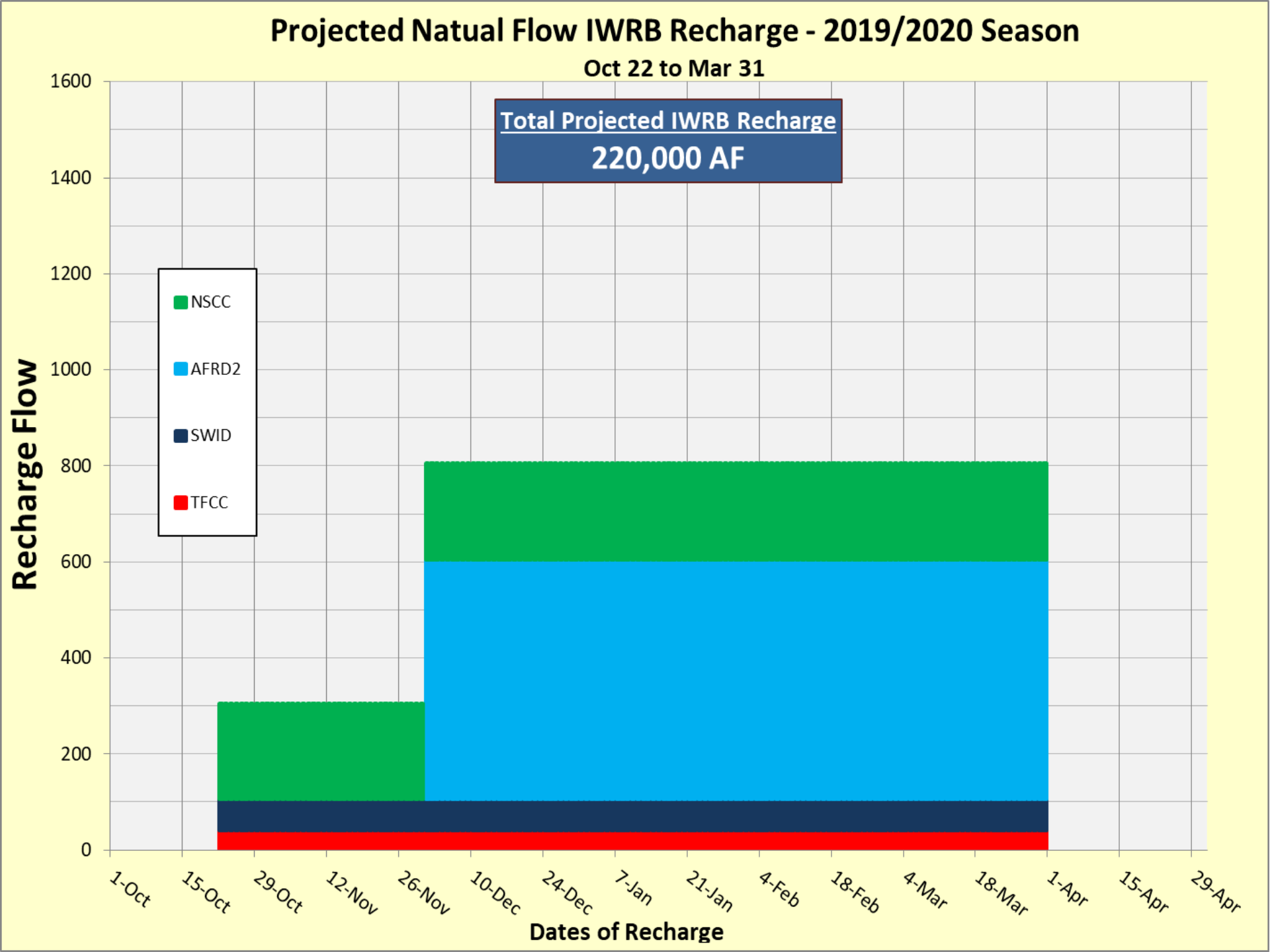
Lower Valley Recharge – 2019/2020 Capacity




Projected Natual Flow IWRB Recharge - 2019/2020 Season
Oct 22 to Mar 31
Total Projected IWRB Recharge
220,000 AF
NSCC
AFRD2
SWID
TFCC
Recharge Flow
1600
1400
1200
1000
800
600
400
200
0
1-Oct
15-Oct
29-Oct
12-Nov
26-Nov
10-Dec
24-Dec
7-Jan
21-Jan
4-Feb
18-Feb
4-Mar
18-Mar
1-Apr
15-Apr
29-Apr
Dates of Recharge

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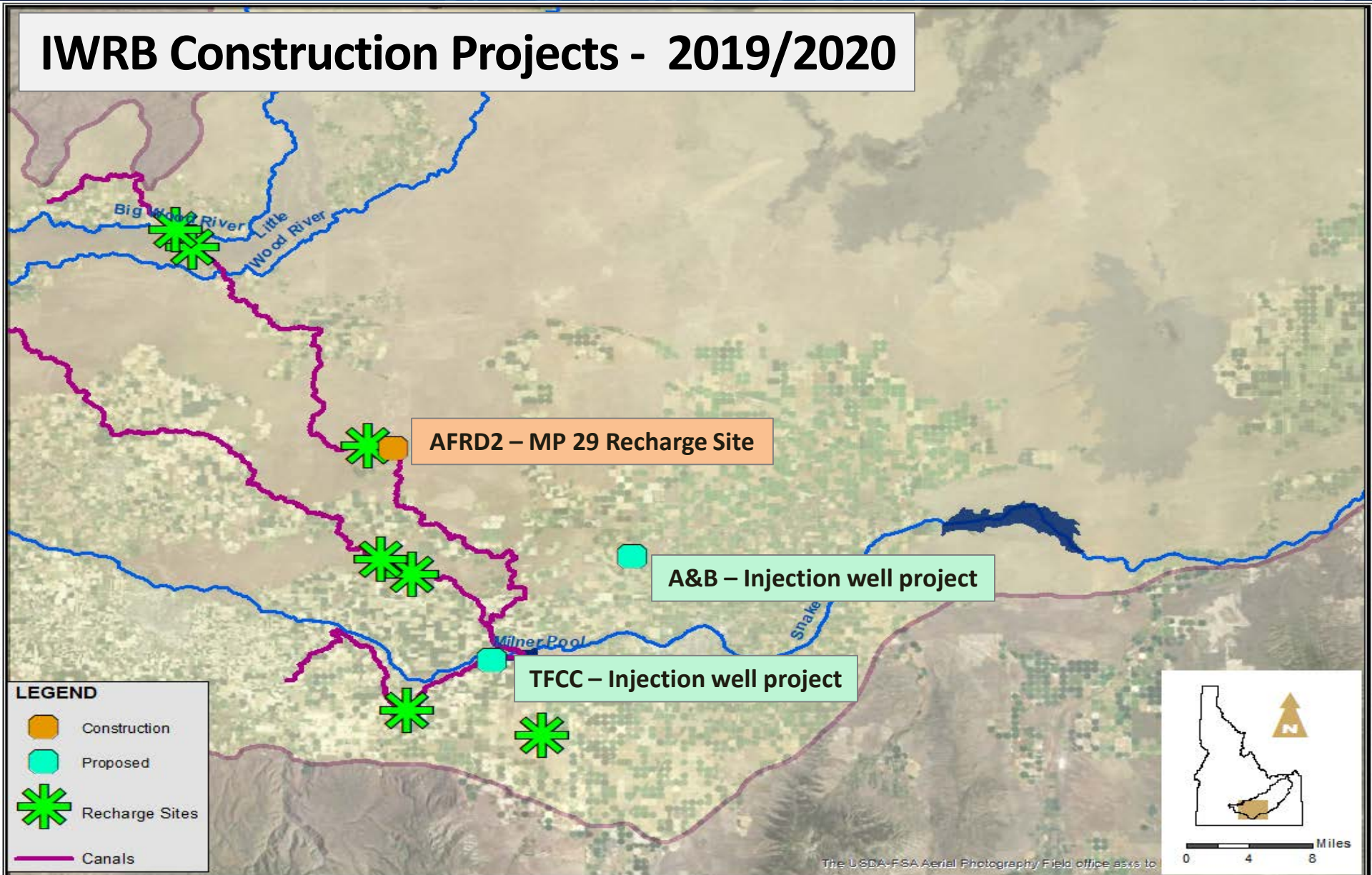
IWRB Construction Projects - 2019/2020



Mid-Snake Recharge Injection Wells Project

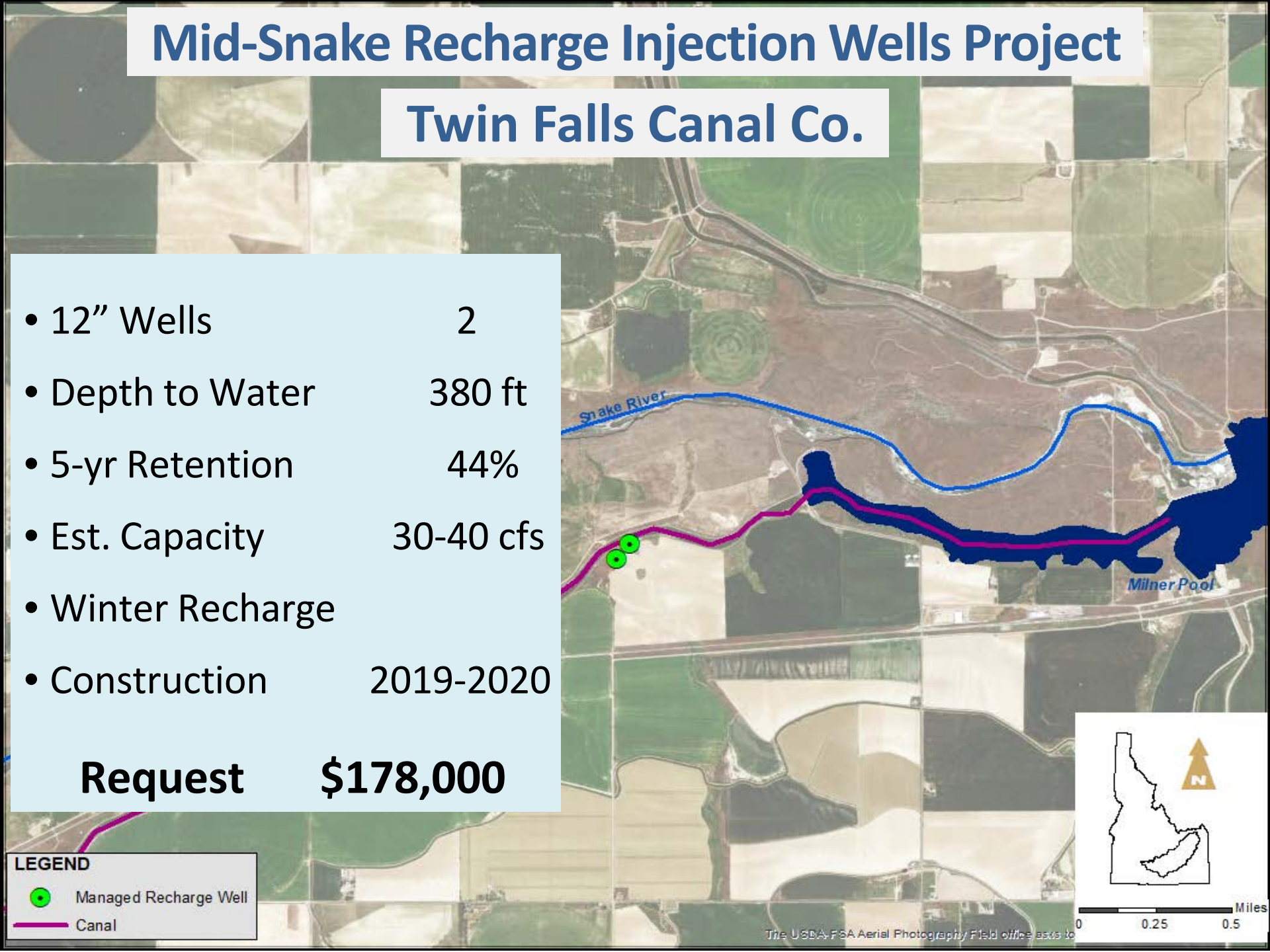
Twin Falls Canal Co. & A8B Irr. District

• Deep Managed Recharge Wells	6
• Potential Capacity	54-72 cfs
• Projected Cost	$630,000
• USBOR WaterSmart Grant	$250,000
• Construction	2019-2021
• Total Requested Funds	$380,000

Mid-Snake Recharge Injection Wells Project

Twin Falls Canal Co.

• 12” Wells	2
• Depth to Water	380 ft
• 5-yr Retention	44%
• Est. Capacity	30-40 cfs
• Winter Recharge	
• Construction	2019-2020
Request	**$178,000**



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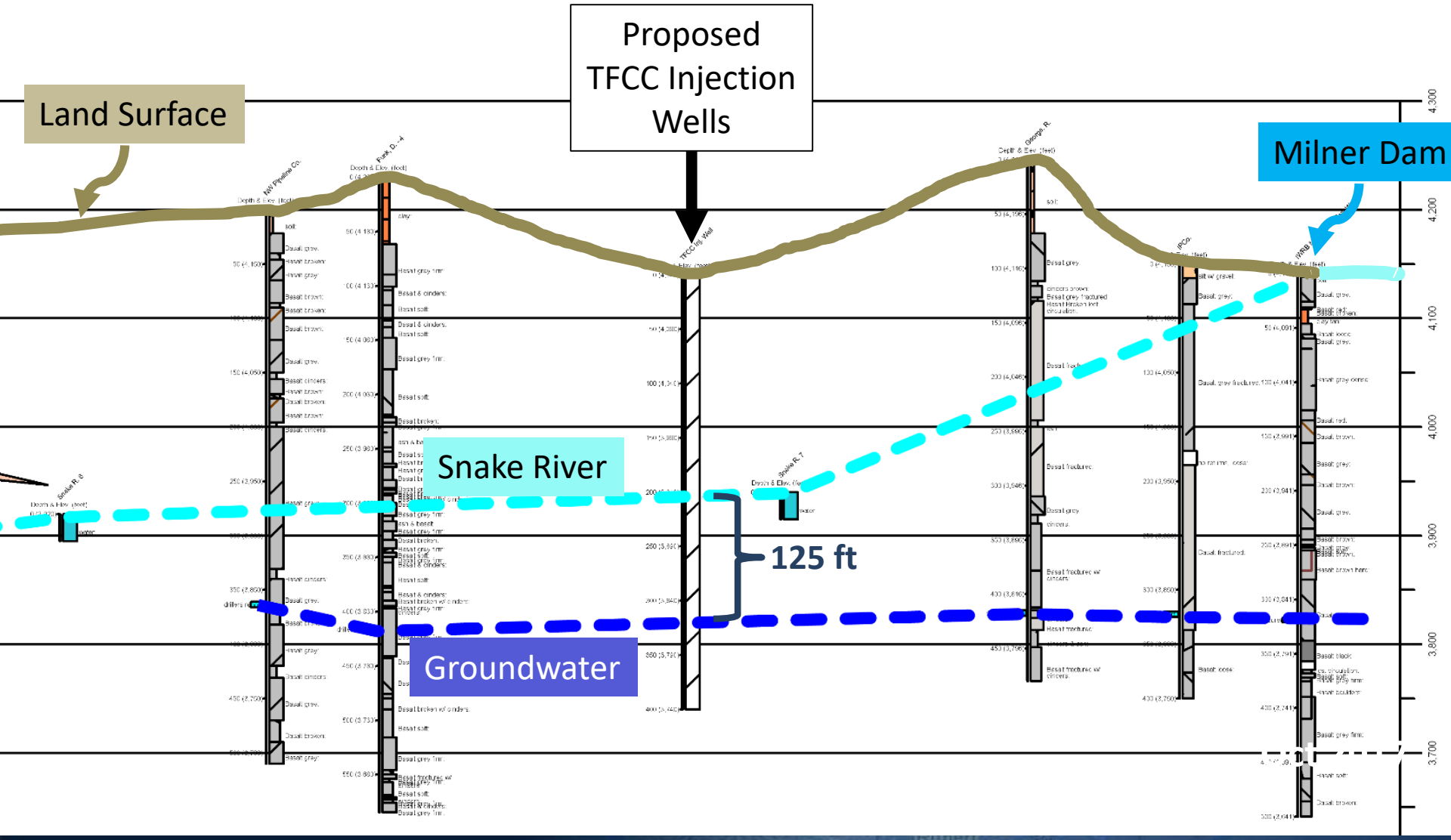
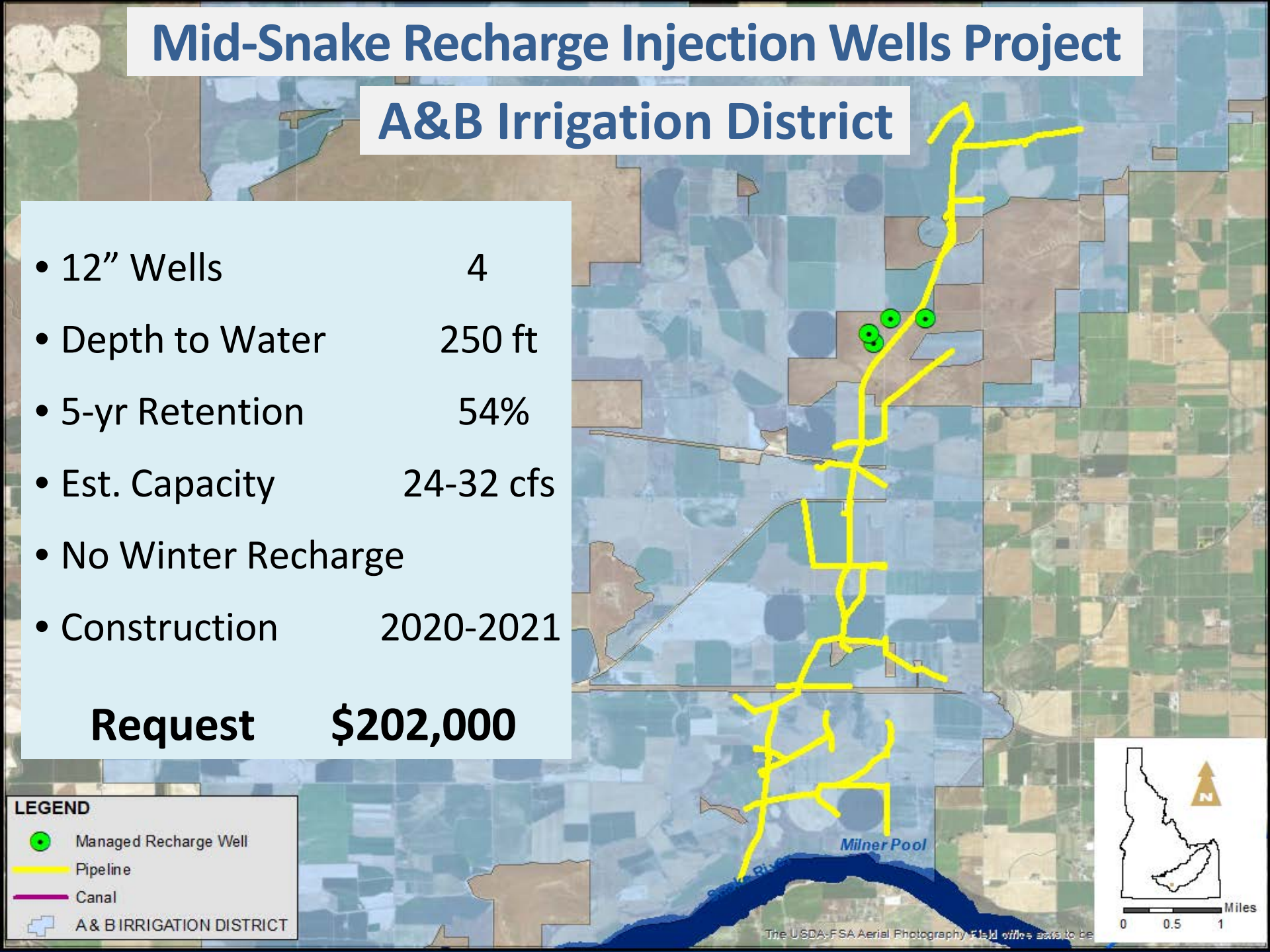


Mid-Snake Recharge Injection Wells Project

A&B Irrigation District

- 12” Wells 4
- Depth to Water 250 ft
- 5-yr Retention 54%
- Est. Capacity 24-32 cfs
- No Winter Recharge
- Construction 2020-2021

Request $202,000



Questions

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE A&B IRRIGATION DISTRICT'S RECHARGE INJECTION WELLS	RESOLUTION TO APPROVE FUNDS FROM THE SECONDARY AQUIFER PLANNING, MANAGEMENT, AND IMPLEMENTATION FUND AND PROVIDE SIGNATORY AUTHORITY

WHEREAS, the Eastern Snake Plain Aquifer (ESPA) has been losing approximately 216,000 acre-feet annually from aquifer storage since the 1950's resulting in declining ground water levels in the aquifer and reduced spring flows to the Snake River; and

WHEREAS, the State Water Plan includes a goal to accomplish managed recharge in the ESPA averaging 250,000 acre-feet annually; and

WHEREAS, House Bill 547 passed and approved by the 2014 Legislature allocates $5 million from the Cigarette Tax to the Idaho Water Resource Board's (IWRB) Secondary Aquifer Planning, Management, and Implementation Fund (Secondary Aquifer Fund) for statewide aquifer stabilization; and

WHEREAS, Senate Bill 1402 passed and approved by the 2016 Legislature allocated $5 million in ongoing General Fund dollars and $2.5 million in Economic Recovery Reserve Funds to the IWRB's Secondary Aquifer Fund for statewide water sustainability and aquifer stabilization; and

WHEREAS, the 2016 Idaho Legislature passed and approved Senate Concurrent Resolution 136 directing the IWRB to develop the capacity to achieve 250,000 acre-feet of annual average managed recharge to the ESPA by December 31, 2024; and

WHEREAS, on May 10, 2019, the IWRB adopted Resolution 7-2019, the Secondary Aquifer Fund Fiscal Year 2020 Budget, which included $500,000 for the development of A&B Injection Wells to improve managed recharge capacity in the ESPA; and

WHEREAS, the A&B Irrigation District (ABID) and Twin Falls Canal Company (TFCC) propose development of the Mid-Snake Recharge Injection Wells Project (project) which includes construction of six deep injection wells to recharge the ESPA with Snake River water during the non-irrigation and irrigation seasons. Total project costs are estimated to be $630,000; and

WHEREAS, the US Bureau of Reclamation approved a $250,000 Water SMART grant for the project; and

WHEREAS, ABID and TFCC submitted a joint proposal for development of two injection wells off TFCC's main canal below the Milner Pool (TFCC injection wells) and development of four injection wells off ABID's pipeline from the Milner Pool (ABID injection wells).

WHEREAS, total project costs for development of the ABID injection wells are estimated to be $337,016, $135,016 of which will be funded through the approved Water SMART grant. ABID is requesting

funding from the IWRB in the amount of $202,000 for the remainder of the project costs.

NOW THEREFORE BE IT RESOLVED that the IWRB authorizes expenditures not to exceed $202,000 from the Secondary Aquifer Fund for the development four injection wells for recharge purposes off the ABID main canal as part of the Mid-Snake Recharge Injection Wells Project; and

NOW, THEREFORE BE IT RESOLVED that the IWRB authorizes its chairman or designee, Brian Patton, Executive Officer to the IWRB, to execute the necessary agreements or contracts to complete development of the ABID injection wells.

DATED this 20th day of September, 2019.

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ROGER W. CHASE, Chairman
Idaho Water Resource Board

ATTEST _____
VINCE ALBERDI, Secretary

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE TWIN FALLS CANAL COMPANY'S RECHARGE INJECTION WELLS	RESOLUTION TO APPROVE FUNDS FROM THE SECONDARY AQUIFER PLANNING, MANAGEMENT, AND IMPLEMENTATION FUND AND PROVIDE SIGNATORY AUTHORITY

WHEREAS, the Eastern Snake Plain Aquifer (ESPA) has been losing approximately 216,000 acre-feet annually from aquifer storage since the 1950's resulting in declining ground water levels in the aquifer and reduced spring flows to the Snake River; and

WHEREAS, the State Water Plan includes a goal to accomplish managed recharge in the ESPA averaging 250,000 acre-feet annually; and

WHEREAS, House Bill 547 passed and approved by the 2014 Legislature allocates $5 million from the Cigarette Tax to the Idaho Water Resource Board's (IWRB) Secondary Aquifer Planning, Management, and Implementation Fund (Secondary Aquifer Fund) for statewide aquifer stabilization; and

WHEREAS, Senate Bill 1402 passed and approved by the 2016 Legislature allocated $5 million in ongoing General Fund dollars and $2.5 million in Economic Recovery Reserve Funds to the IWRB's Secondary Aquifer Fund for statewide water sustainability and aquifer stabilization; and

WHEREAS, the 2016 Idaho Legislature passed and approved Senate Concurrent Resolution 136 directing the IWRB to develop the capacity to achieve 250,000 acre-feet of annual average managed recharge to the ESPA by December 31, 2024; and

WHEREAS, on May 10, 2019, the IWRB adopted Resolution 7-2019, the Secondary Aquifer Fund Fiscal Year 2020 Budget, which included $500,000 for the development of the A&B Injection Wells to improve managed recharge capacity in the ESPA; and

WHEREAS, the A&B Irrigation District (ABID) and Twin Falls Canal Company (TFCC) propose development of the Mid-Snake Recharge Injection Wells Project (project) which includes construction of six deep injection wells to recharge the ESPA with Snake River water during the non-irrigation and irrigation seasons. Total project costs are estimated to be$630,000; and

WHEREAS, the US Bureau of Reclamation approved a $250,000 Water SMART grant for the project; and

WHEREAS, ABID and TFCC submitted a joint proposal for development of two injection wells off TFCC's main canal below the Milner Pool (TFCC injection wells) and development of four injection wells off ABID's pipeline from the Milner Pool (ABID injection wells).

WHEREAS, total project costs for development of the TFCC injection wells are estimated to be $292,984, $114,984 of which will be funded through the approved Water SMART grant. TFCC is requesting

funding from the IWRB in the amount of $178,000 for the remainder of the project costs.

NOW THEREFORE BE IT RESOLVED that the IWRB authorizes expenditures not to exceed $178,000 from the Secondary Aquifer Fund for the development two injection wells for recharge purposes off the TFCC main canal as part of the Mid-Snake Recharge Injection Wells Project; and

NOW, THEREFORE BE IT RESOLVED that the IWRB authorizes its chairman or designee, Brian Patton, Executive Officer to the IWRB, to execute the necessary agreements or contracts to complete the development of the TFCC injection wells.

DATED this 20th day of September, 2019.

_____
ROGER W. CHASE, Chairman
Idaho Water Resource Board

ATTEST _____
VINCE ALBERDI, Secretary