



# Grand View-Bruneau Ground Water Management Area Management Plan

Public Meeting, Bruneau, Idaho  
December 6, 2022

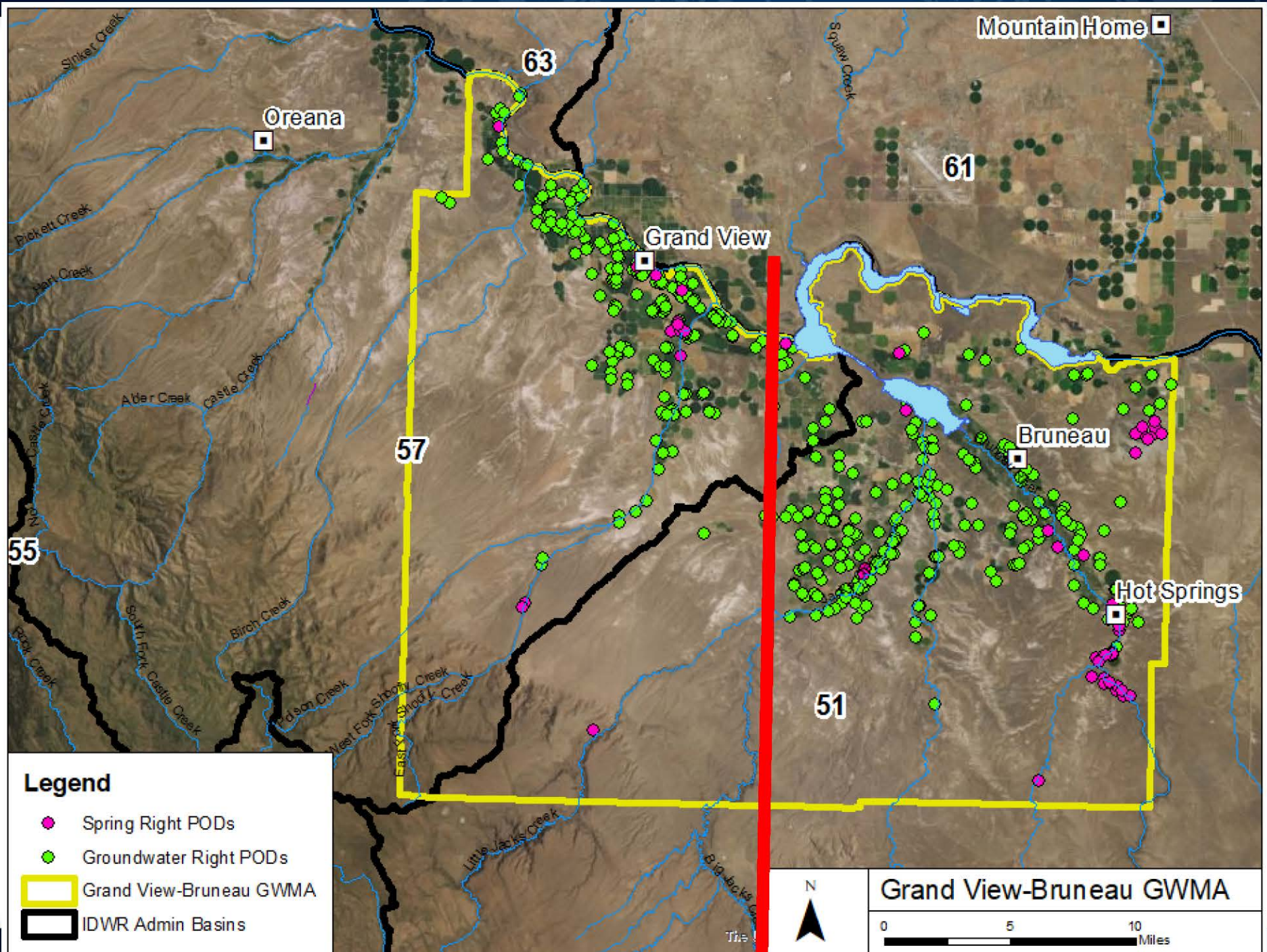
Erik Boe of IDWR



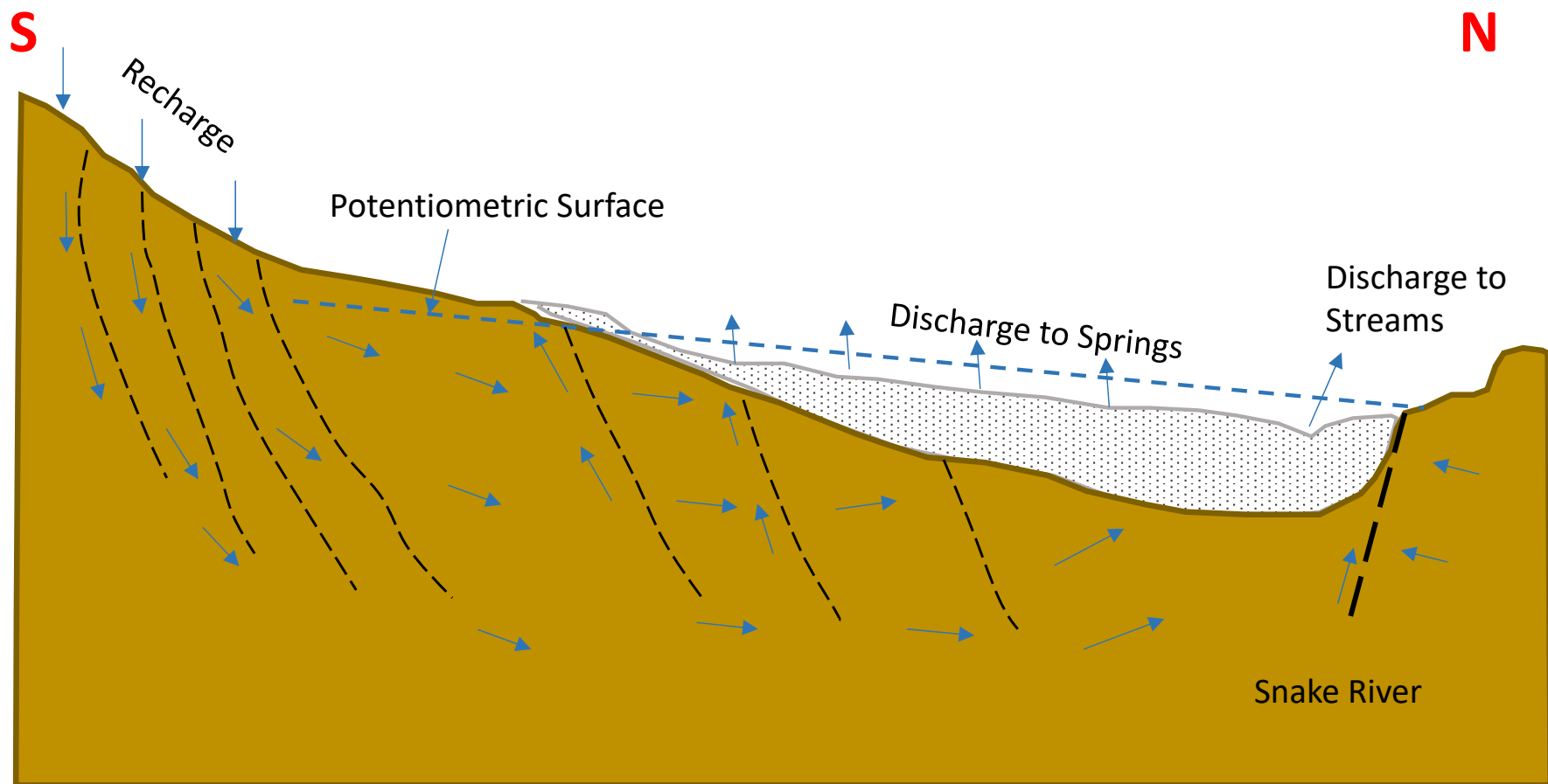
IDAHO DEPARTMENT OF  
**WATER RESOURCES**

# Grand View-Bruneau GWMA

- Established on October 29, 1982
  - In response to increased and projected increases in groundwater withdrawals and declining spring flows from the geothermal aquifer system
  - Authorized by Idaho Code § 42-233b
- Groundwater levels have been declining 0.7' to 0.8' per year.
  - Monitoring as far back as 1950's



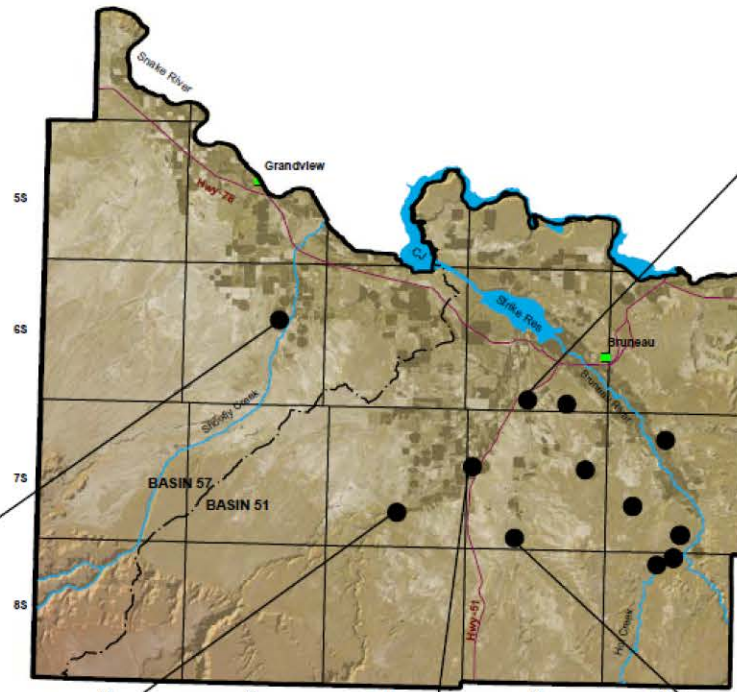
# Conceptual Model of the Aquifer System



## Grandview-Bruneau Hydrographs – West Area

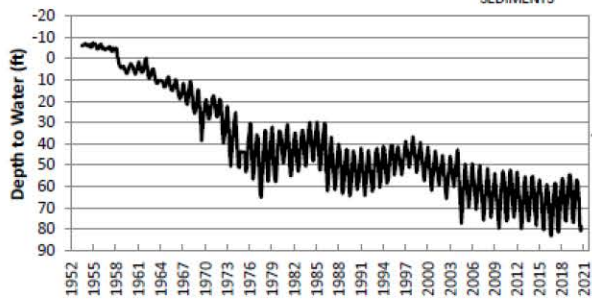
### HYDROGRAPH LEGEND

**TD:** Total Depth  
**OP:** Interval that well is open to aquifer  
**VOLCANICS:** Water Bearing Lithology  
**NA:** Information is unknown  
 --- Indicates more than one month between measurements



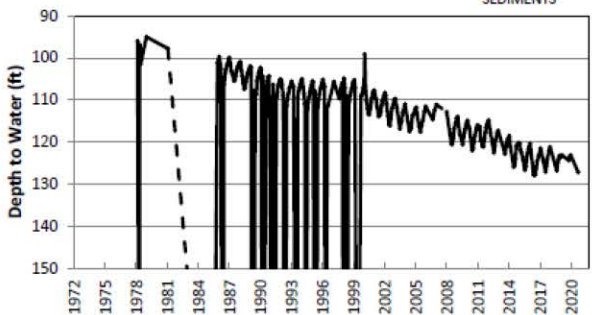
**06S03E-14BCB1**

TD: 1,324 ft  
 OP: 373-1,342 ft  
 SEDIMENTS



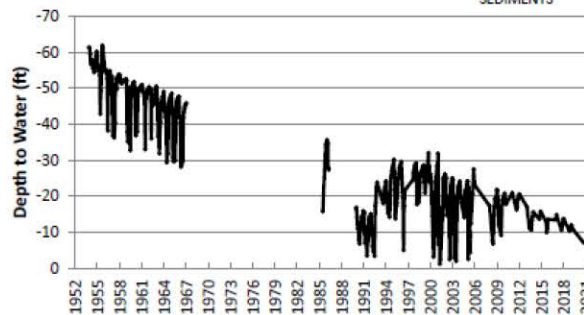
**07S04E-27BCC1**

TD: 1,390 ft  
 OP: 19-1,390 ft  
 SEDIMENTS



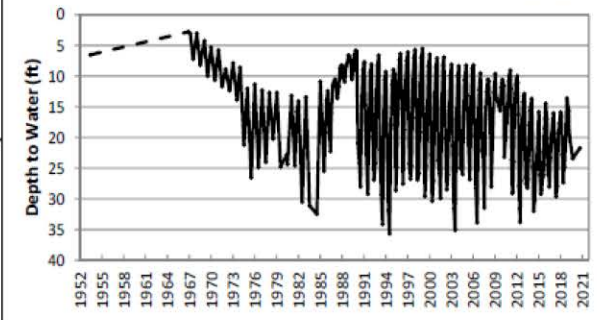
**07S05E-18BCD1**

TD: 409 ft  
 OP: 382-402 ft  
 SEDIMENTS



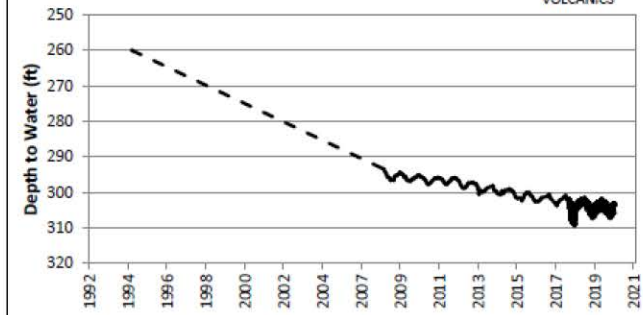
**06S05E-33DBB1**

TD: 142 ft  
 OP: NA



**07S05E-33BCC1**

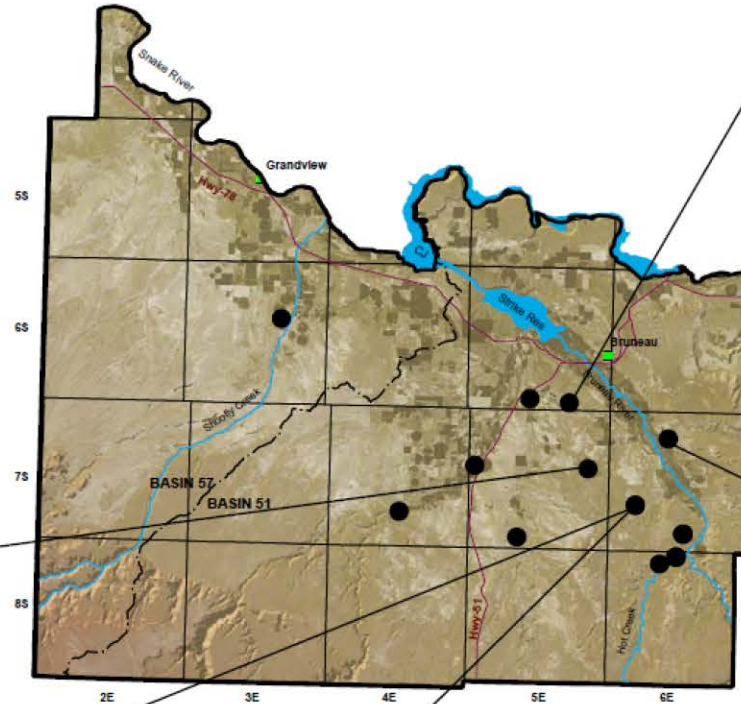
TD: 517 ft  
 OP: 245-517 ft  
 VOLCANICS



## Grandview-Bruneau Hydrographs – East Area

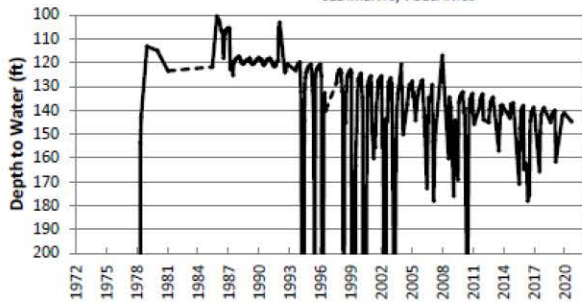
### HYDROGRAPH LEGEND

- TD:** Total Depth
- OP:** Interval that well is open to aquifer
- VOLCANICS:** Water Bearing Lithology
- NA:** Information is unknown
- Indicates more than one month between measurements



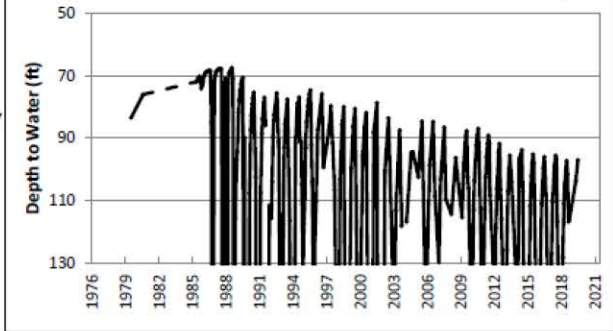
**07S05E-13CBB1**

TD: 1,954 ft  
OP: 180-710; 1,070-1,180; 1,560-1,680 ft  
SEDIMENTS, VOLCANICS



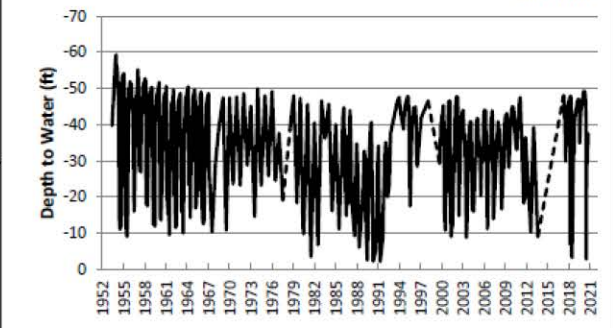
**06S05E-35CBD1**

TD: 480 ft  
OP: 194-480 ft  
VOLCANICS



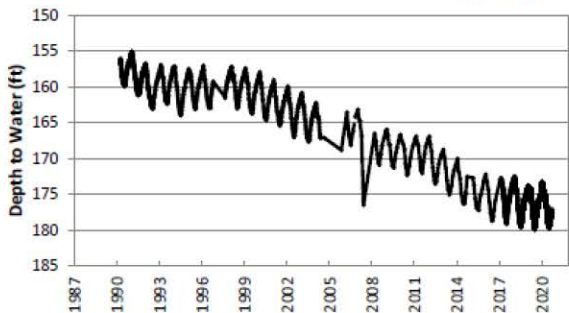
**07S06E-09BAD2**

TD: 960 ft  
OP: NA  
SEDIMENTS



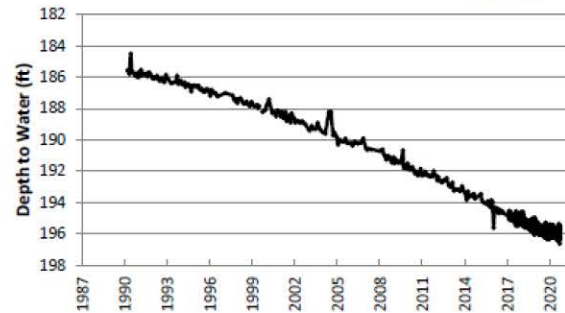
**07S06E-29BBA1**

TD: 760 ft  
OP: 415-760 ft  
VOLCANICS



**07S06E-29BBA2**

TD: 364 ft  
OP: 246-364 ft  
VOLCANICS



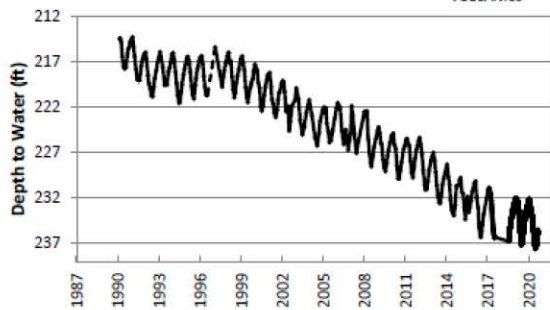
## Grandview-Bruneau Hydrographs – Bathtub Area

### HYDROGRAPH LEGEND

**TD:** Total Depth  
**OP:** Interval that well is open to aquifer  
**VOLCANICS:** Water Bearing Lithology  
**NA:** Information is unknown  
 - - - Indicates more than one month between measurements

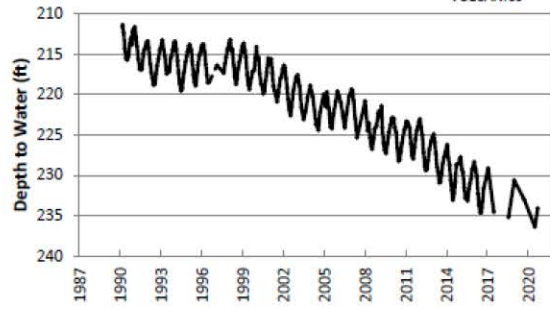
**07S06E-34BCA2**

TD: 323 ft  
OP: 302-322 ft  
VOLCANICS



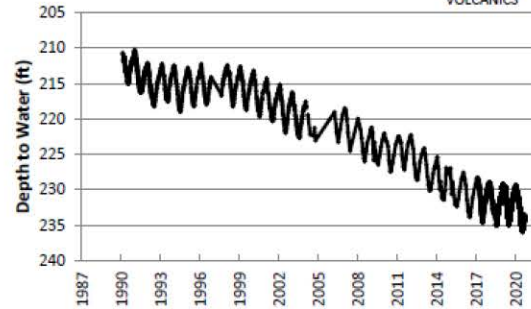
**07S06E-34BCA3**

TD: 679 ft  
OP: 659-679 ft  
VOLCANICS



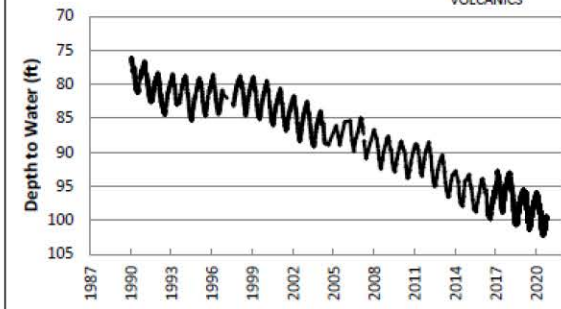
**07S06E-34BCA1**

TD: 681 ft  
OP: 322-681 ft  
VOLCANICS



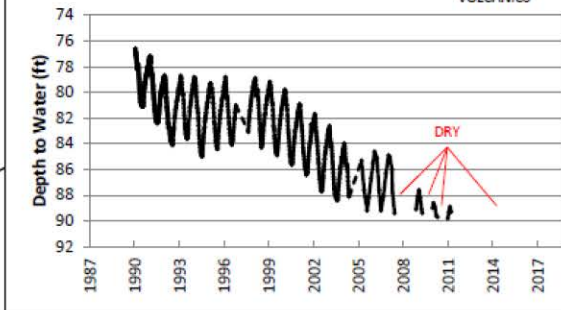
**08S06E-03BDC1**

TD: 480 ft  
OP: 194-480 ft  
VOLCANICS



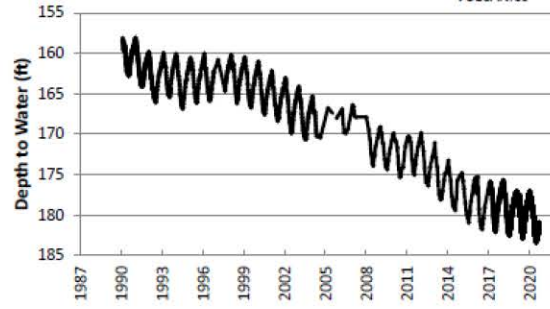
**08S06E-03BDC2**

TD: 90 ft  
OP: 80-90 ft  
VOLCANICS



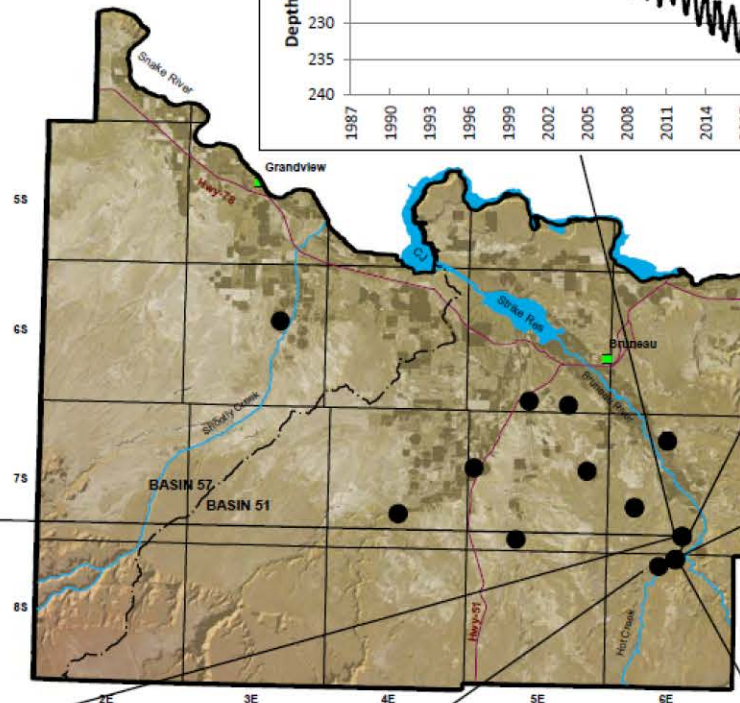
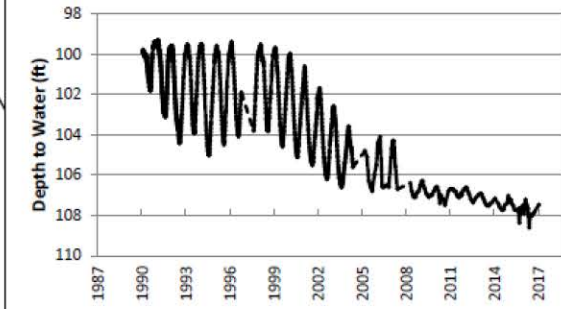
**08S06E-04DCD1**

TD: 600 ft  
OP: 170-600 ft  
VOLCANICS



**08S06E-03BDC3**

TD: 140 ft  
OP: 120-140 ft  
VOLCANICS



# How do we Stabilize the Aquifer?

- Designation of GWMA alone will not address the declining aquifer system
  - Need goals and implementation strategy
- Advisory Committee concept implemented in 1994
  - Now formed subsequently to formation of GWMA
  - Local knowledge and input
  - Forum for discussion and communication
  - Assist in development of a Management Plan
- What exactly is a Management Plan?
  - Document that identifies and implements management practices and strategies to stabilize the aquifer.
  - An alternative approach to managing a resource

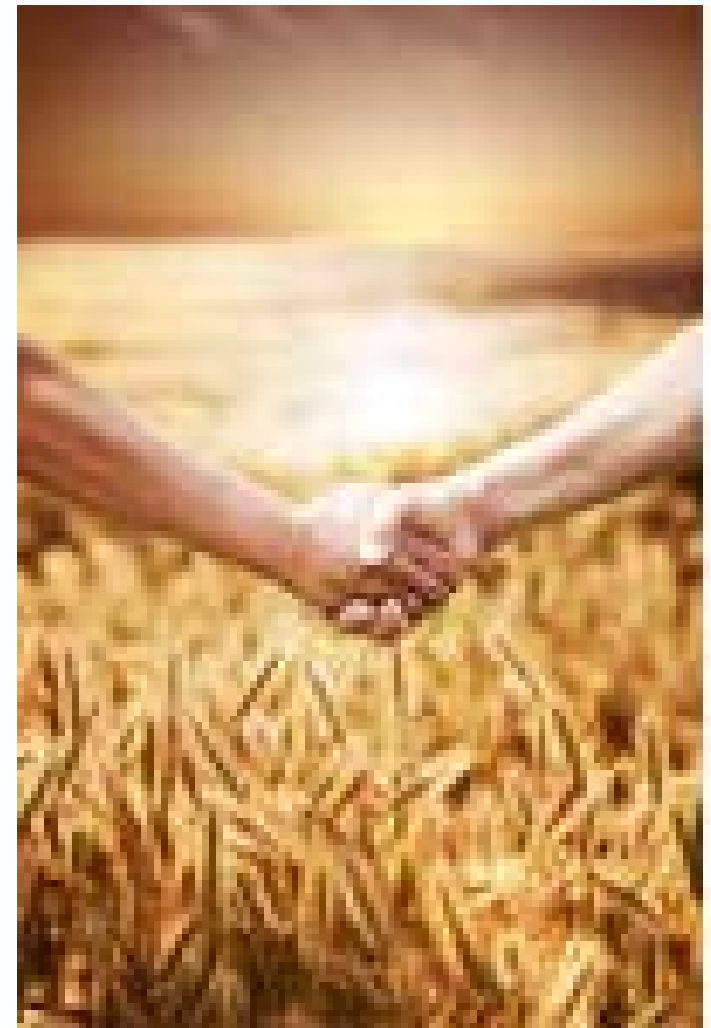


**Water District  
Delivery Call**



**OR**

**Management Plan**



# GBGWMA Advisory Committee

- Formed in 2021, 11 members of the local community volunteered to participate on Advisory Committee
- To date, 9 open public meetings have been held
- Cooperative effort to develop Management Plan
- June 22, 2022 – Advisory Committee approved draft Management Plan; ready to submit to the Director.
- September 23, 2022 – Updated draft (minor edits)

# GBGWMA Advisory Committee

## Committee Members

- Sid Erwin, Individual
- Chris Black, Individual
- Gene Tindall, Individual
- Bill White, Individual
- Roy Mink, Individual
- Stacey Buckingham, Individual
- Bill Wolfe, Individual
- Russell Schiermeier, Schiermeier Farms
- Kent Frisch, Consultant Representing Simplot Co.
- John Morrison, Councilman, Grand View City Council
- Ken Unruh, Individual

# Draft Management Plan Overview



## Management Plan Goals

### **Stabilize the declining aquifer system**

- A. Protect existing groundwater rights
- B. Expand/improve groundwater monitoring program
- C. Evaluate potential recharge sites
- D. Inventory, identify, and prioritize leaking (flowing) LTG wells in need of repair, replacement, abandonment
- E. Organize groundwater users in the GWMA to help address management issues at local level
- F. Promote conservation of groundwater resources
- G. Develop groundwater model for the aquifer system

## Management Plan Term

- Term of this Management Plan will be perpetual
- Advisory Committee will meet annually to review and modify the Management Plan as needed.
- Every five (5) years the Advisory Committee will prepare/submit a summary report documenting progress, effectiveness, and any recommendations
- Modifications of the Management Plan will be subject to the Director's approval.

## Ground Water Management and Implementation Strategies

- A. Ground Water District (GWD) formation
- B. Measurement of Ground Water Diversions
- C. Creation of a Water District (WD)
- D. Expansion of ground water monitoring network
- E. New appropriations of ground water
- F. Public Water Systems (PWS)
- G. Diversion volume reductions
- H. Ground water recharge

## A. Ground Water District (GWD) formation

- Title 42, chapter 52, Idaho Code
- Locally driven process
- Broad authorities
  - Finance and repair/decommission wells
  - Pursue funding (grants) from federal and state agencies
  - Collect and report annual ground water data (to IDWR or WD)
  - Implement programs and studies to protect resources

### Metric:

- Local ground water users to petition the county in 2022\*
- Begin pursuing federal and state cost sharing programs
  - Measurement devices, costs to repair/decommission bad wells



## B. Measurement of Ground Water Diversions

- Director should issue an order requiring measurement and control devices
  - After GWD formed
  - Devices to be installed by start of 2025 irrigation season
  - Excluding domestic and stockwater uses defined by Idaho Code § 42-111



## B. Measurement of Ground Water Diversions (in Parallel)

- Inventory and locate LTG artesian wells in need of repair



## B. Measurement of Ground Water Diversions (in Parallel)

- Determine extent to which actual irrigated lands align with authorized POU boundaries (Water Rights)



## B. Measurement of Ground Water Diversions (in Parallel)

- Determine extent to which actual irrigated lands align with authorized POU boundaries (Water Rights)



## B. Measurement of Ground Water Diversions

Questions to be answered:

- How much water is being diverted?
- Actual diversions consistent with authorized diversions (Water Rights)?

### Metric:

- July 1, 2023, after formation of GWD, the Director to issue order requiring measurement and controlling devices be installed on ground water diversions

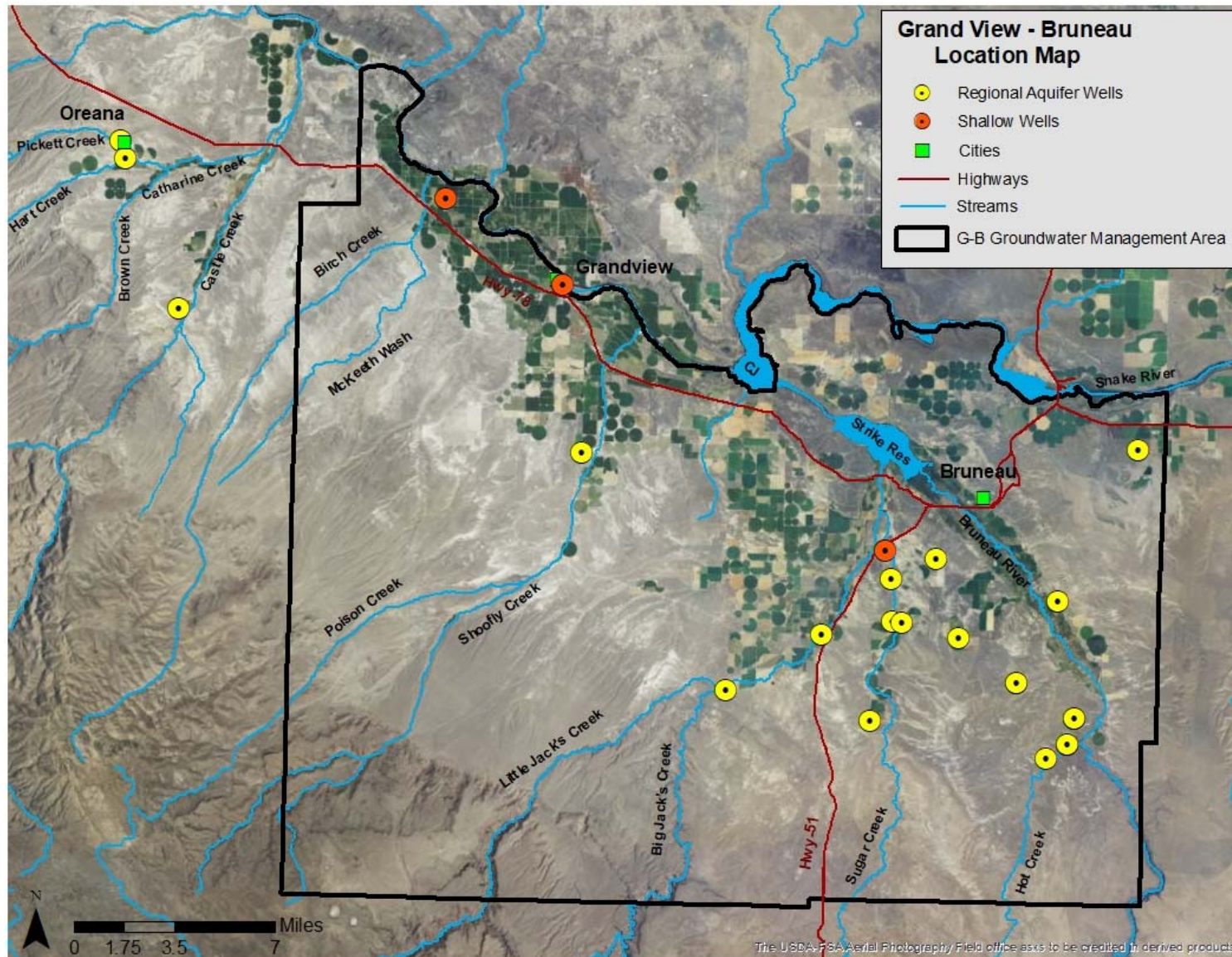
## C. Creation of a Water District (WD)?

- After Advisory Committee submits 1<sup>st</sup> annual report (5-year)
- Director will evaluate progress and effectiveness of GWD
  - Useful or appropriate to create WD? (Title 42, Chapter 6, Idaho Code)

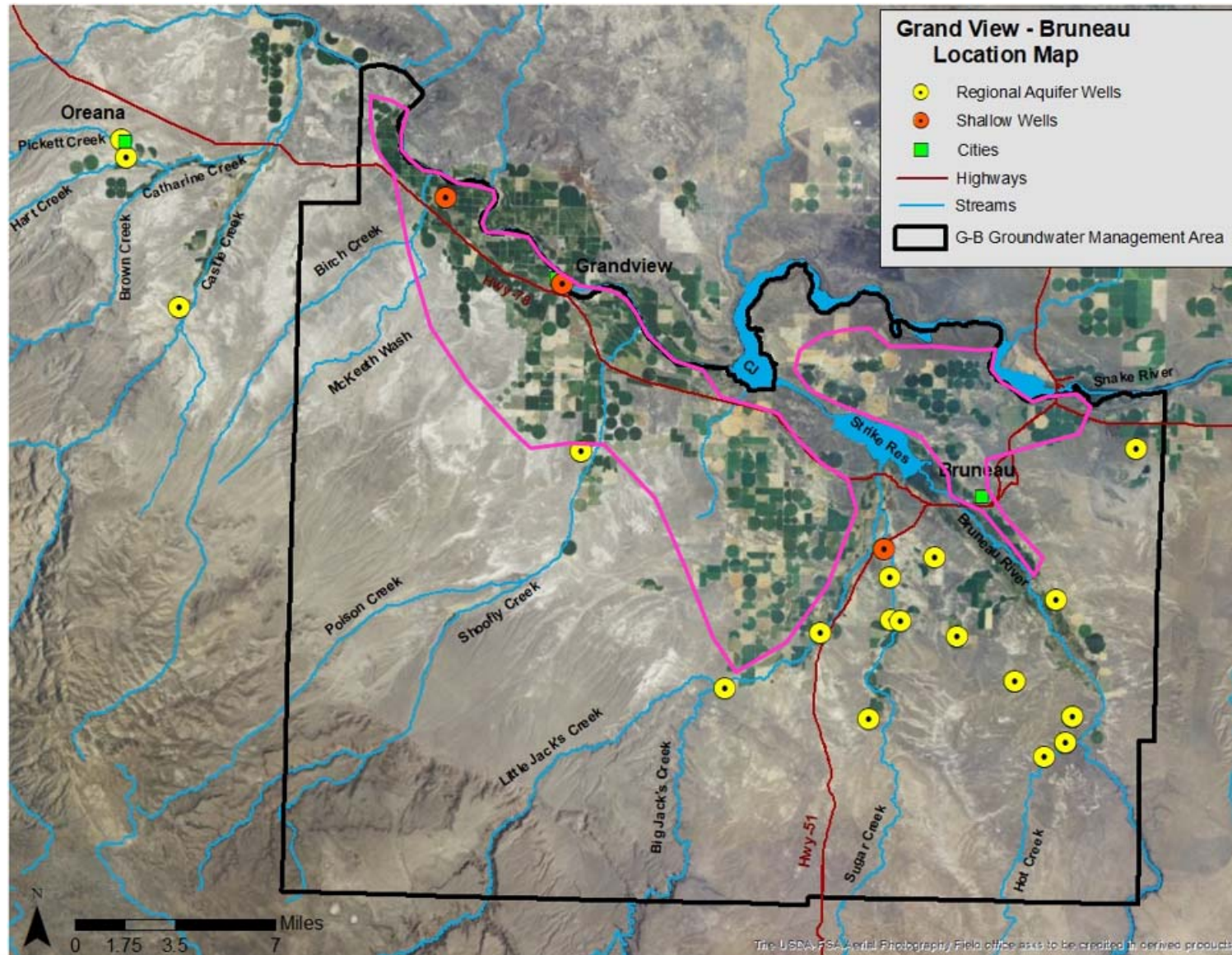
### Metric:

- July 1, 2027, Director will assess need of WD, and if necessary, begin process of creating WD

## D. Expansion of ground water monitoring network



## D. Expansion of ground water monitoring network





## D. Expansion of ground water monitoring network

- Increase the number of monitoring sites
  - Voluntary basis
  - Especially in Grand View and areas near the GWMA (Catherine Creek, Castle Creek, and Oreana drainages)
- Better understanding of the aquifer system
- Development of ground water model
  - Necessary to evaluate implementation of recovery efforts

### Metric:

- Starting 2022, Advisory Committee will coordinate with IDWR to:
  - 1) Identify new monitoring sites
  - 2) Establish criteria (well sites, WL benchmarks) for assessing aquifer WL stabilization goals

## E. How to manage new appropriations of ground water?

- IDWR to consider moratorium order suspending action on water right applications and development of existing permits
  - Authorized by Idaho Code § 42-1805(7) and Rule 55 of IDWR's Water Appropriation Rules (IDAPA 37.03.08)
  - Would exclude water rights used for non-consumptive uses and domestic and stockwater uses defined by Idaho Code § 42-111

### Metric:

- Ground water users shall petition IDWR by end of 2022\* requesting issuance of water rights moratorium order

## F. Incorporate use of Public Water Systems (PWS)

- PWSs defined in IDAPA 58.01.08
- Recommend we promote new or expansion of existing PWSs to discourage drilling of individual domestic wells for new developments
- Encourage conservation plans for water rights associated with PWSs

### Metric:

- Starting 2023, the Advisory Committee shall coordinate with IDWR and local planning and zoning authorities to develop a “Best Practices” document to distribute to developers and the public

## G. Diversion volume reductions

Reduction of ground water consumptive use may be achieved by:

- 1) Conversion of irrigated land to non-irrigation land (temp. or permanent)
- 2) Center pivot end gun removal
- 3) Irrigation system/equipment improvements
- 4) Planting crops requiring less water
- 5) Irrigation season reduction
- 6) Aquaculture efficiency
- 7) Voluntary abandonment, conversion, exchange, or sale of water rights

### Metric:

- Starting 2027, reduce ground water pumping
  - How much? TBD
  - Reductions contingent on establishing baseline data

## H. Ground water recharge

- Inventory potential recharge sites for shallow aquifer system
- Prioritize sites based on cost benefit ratio and time to implement

### Metric:

- By November 1, 2024, develop recommended plan that identifies potential recharge sites

## Next Steps

- Comments due by December 16, 2022  
→ [erik.boe@idwr.idaho.gov](mailto:erik.boe@idwr.idaho.gov)
  
- Director will review comments, then consider finalizing/approval of the Management Plan
  
- Advisory Committee Public Meeting (2/1/2023)

# QUESTIONS?

- Deadline for Public Comments is December 16, 2022
- [erik.boe@idwr.idaho.gov](mailto:erik.boe@idwr.idaho.gov)