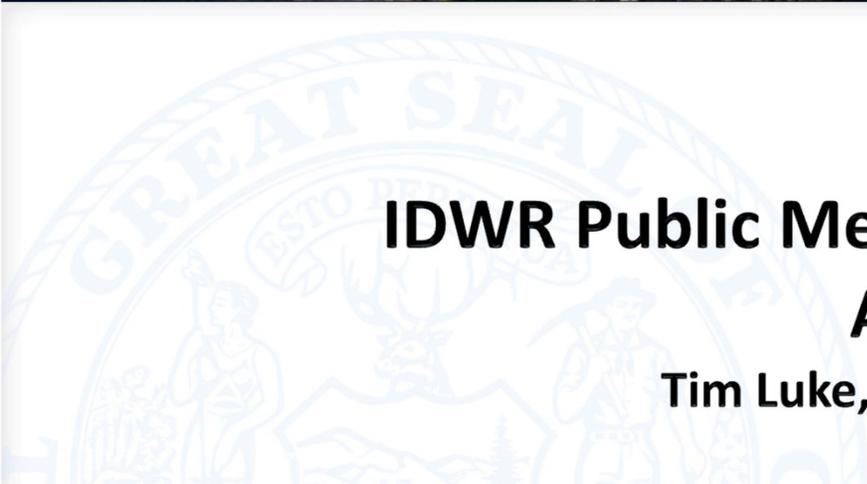


Water District Compliance Water District 29 H, Marsh Creek Drainage



IDWR Public Meeting February 22, 2017

Arimo, ID

Tim Luke, Steve Visosky, IDWR

Welcome

- Water Users/Right Holders
- IDWR Staff
- Elected Officials?

Public Information Meeting

Purpose & Agenda

- Background Presentation/Information
 - Describe proposed action
 - Reasons for proposed action
 - Review of water districts & operations
 - Review of timelines/expectations
- Questions/Answers?

Proposal

Bring WD No. 29 H, Marsh Ck & tribs, in compliance with Idaho law to administer all surface water rights in drainage except:

- In-stream stock water right

Proposal

Meeting notice did not propose:

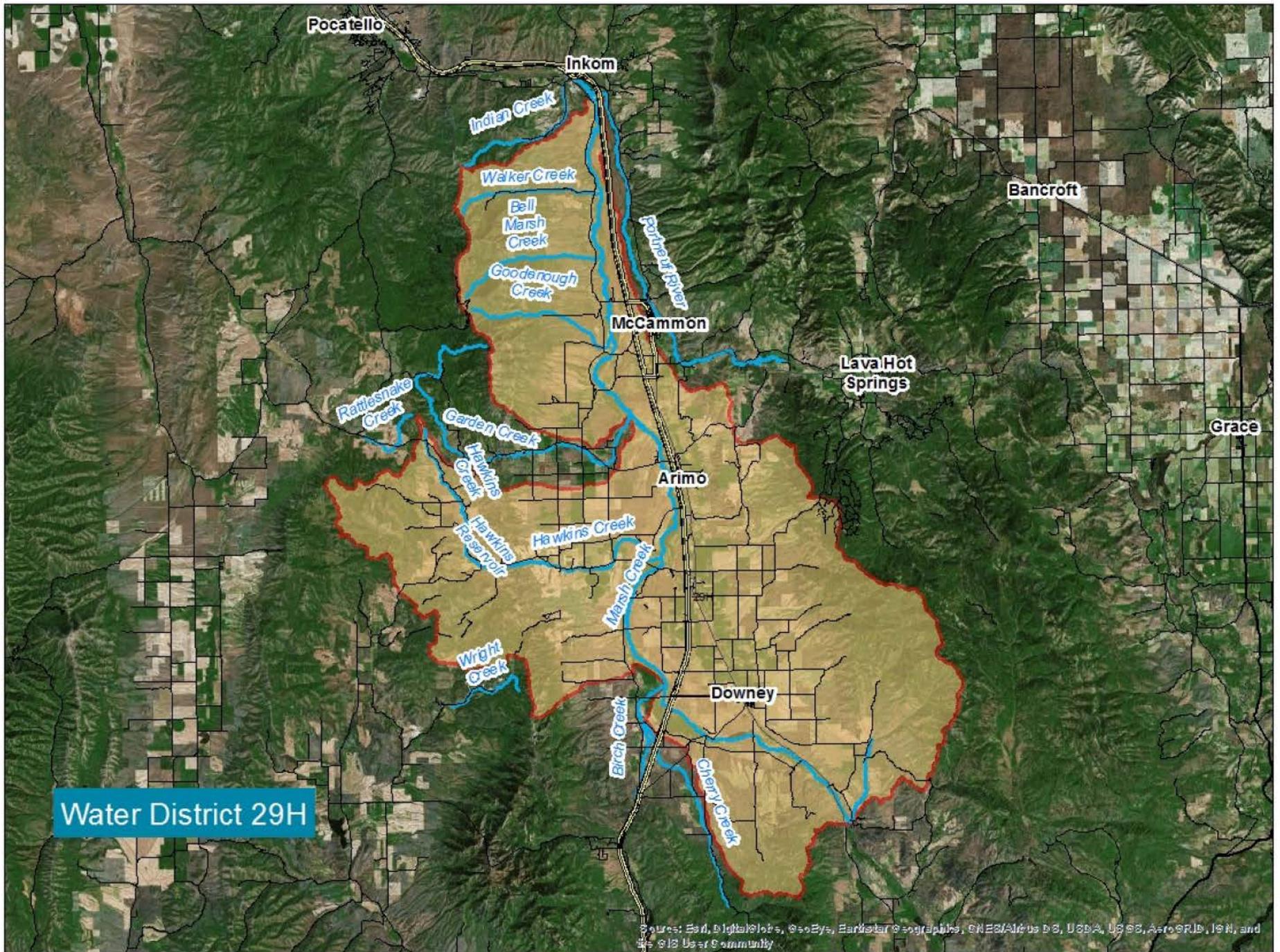
- Merging of districts
- Changes or modifications to WD29H or existing, surrounding water districts
- Inclusion of ground water rights

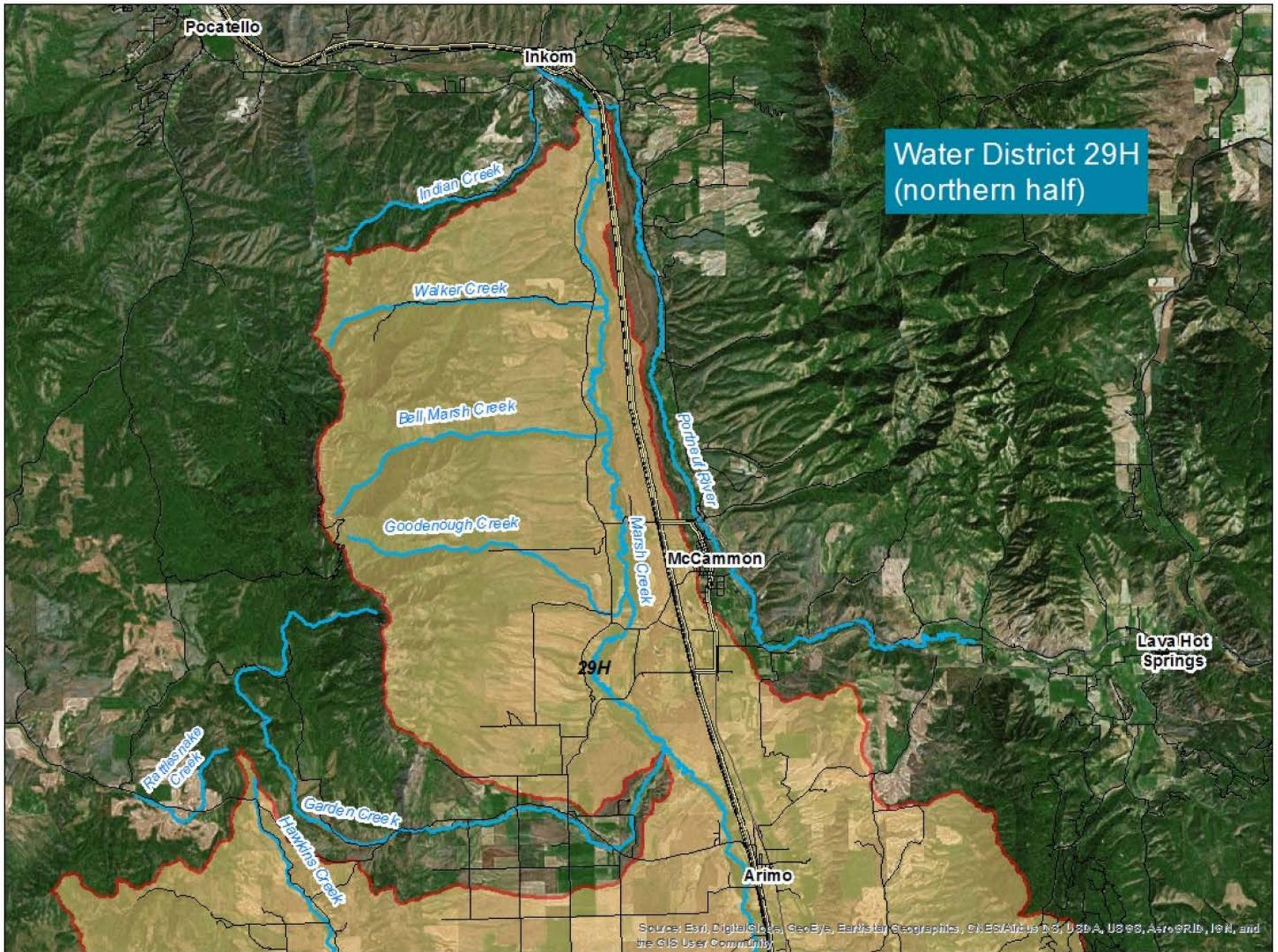
Area of Notice

- All surface water rights from the Marsh Creek drainage located within the Portneuf River Basin, excluding Birch Creek and Garden Creek drainages.

About 200 Notices Sent*

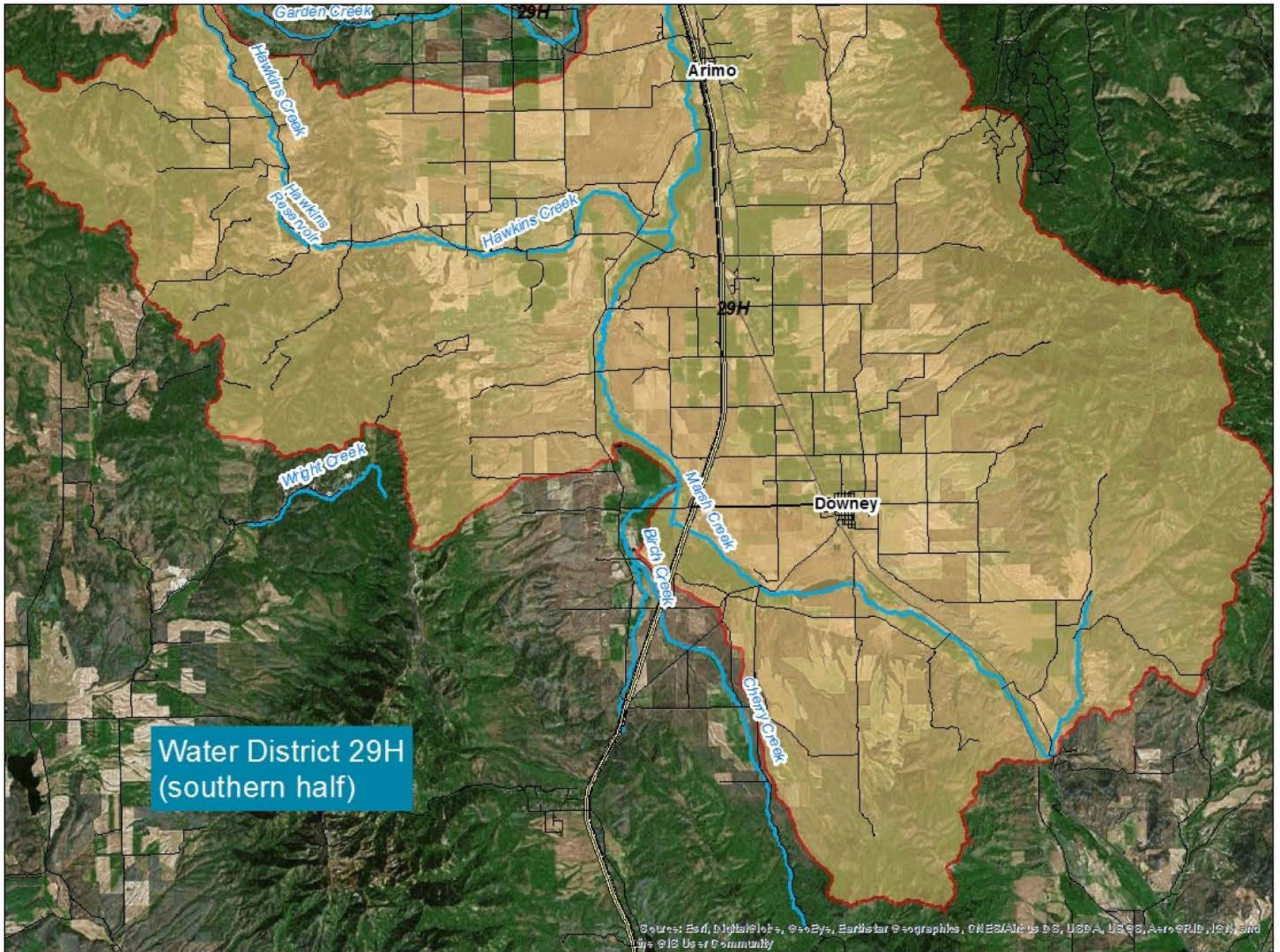
*Note: About 32 notices returned





Water District 29H
(northern half)

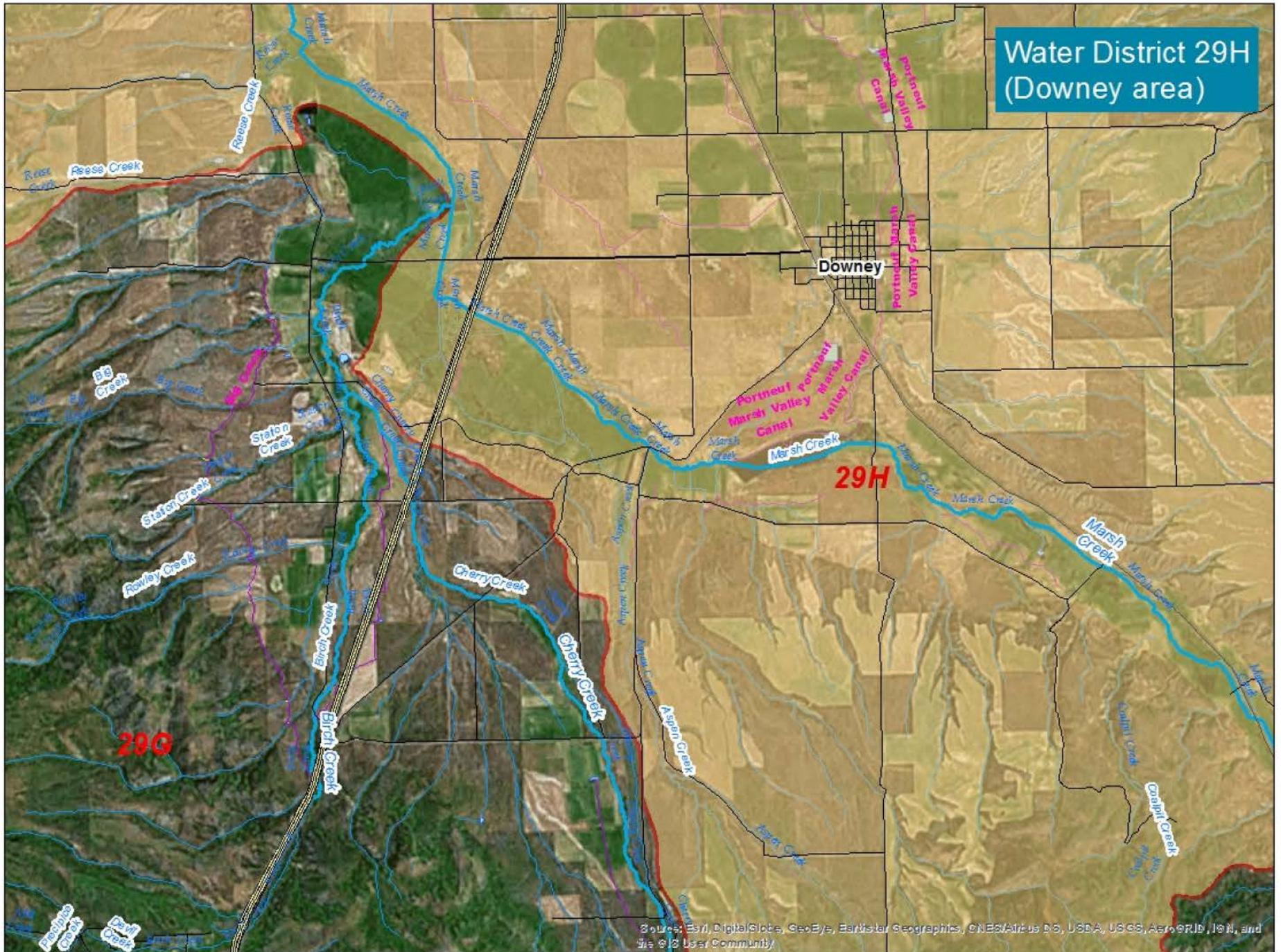
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



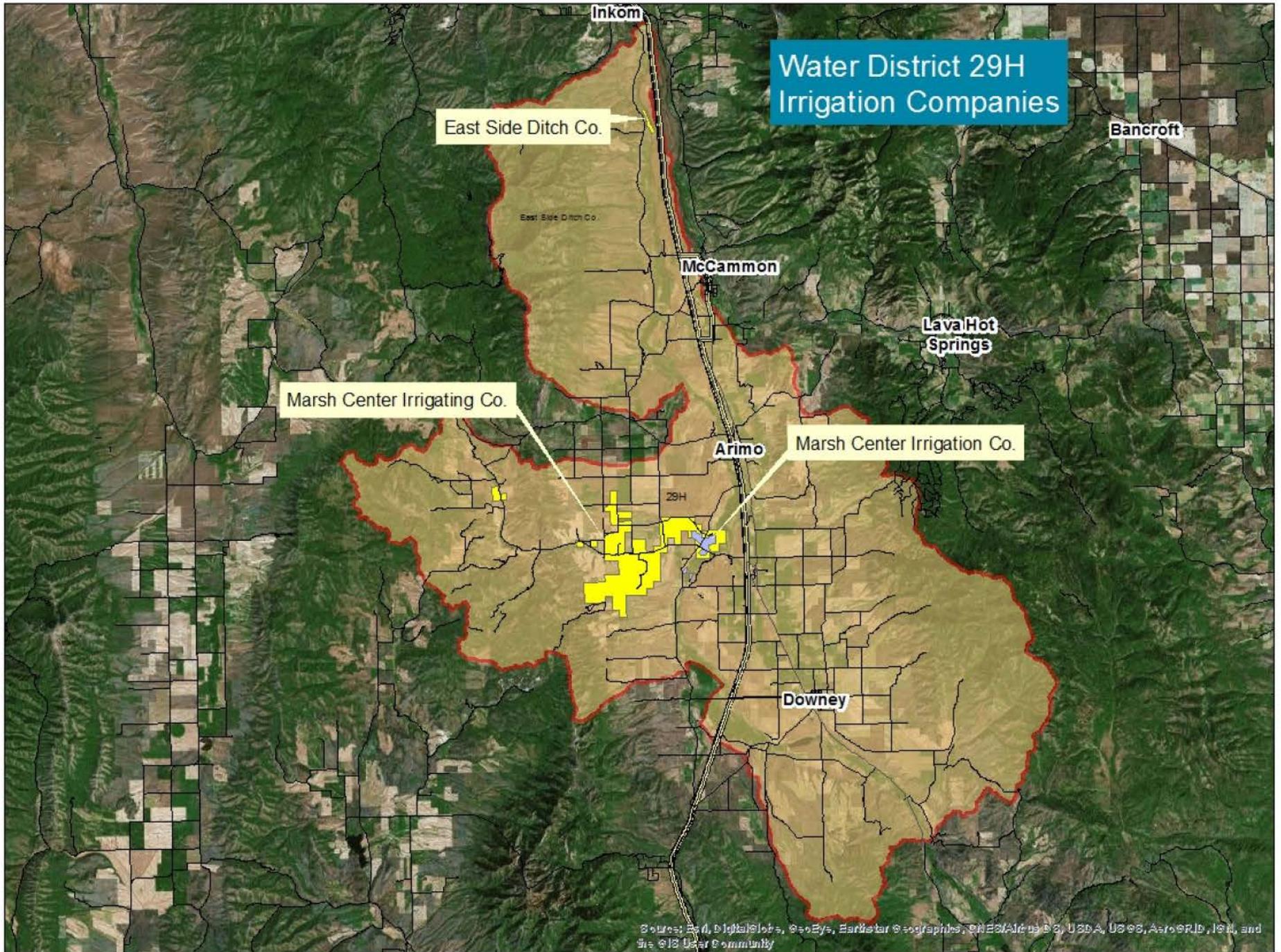
Water District 29H
(southern half)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Water District 29H
(Downey area)



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Number of Water Rights in Area

- About 400 unique water rights
 - \approx 250 water rights that include irrigation use
 - \approx 150 water rights for non-irrigation uses
 - Nearly all non-irrigation rights are de-minimis domestic & stock water uses

Water Right Use & Diversions*

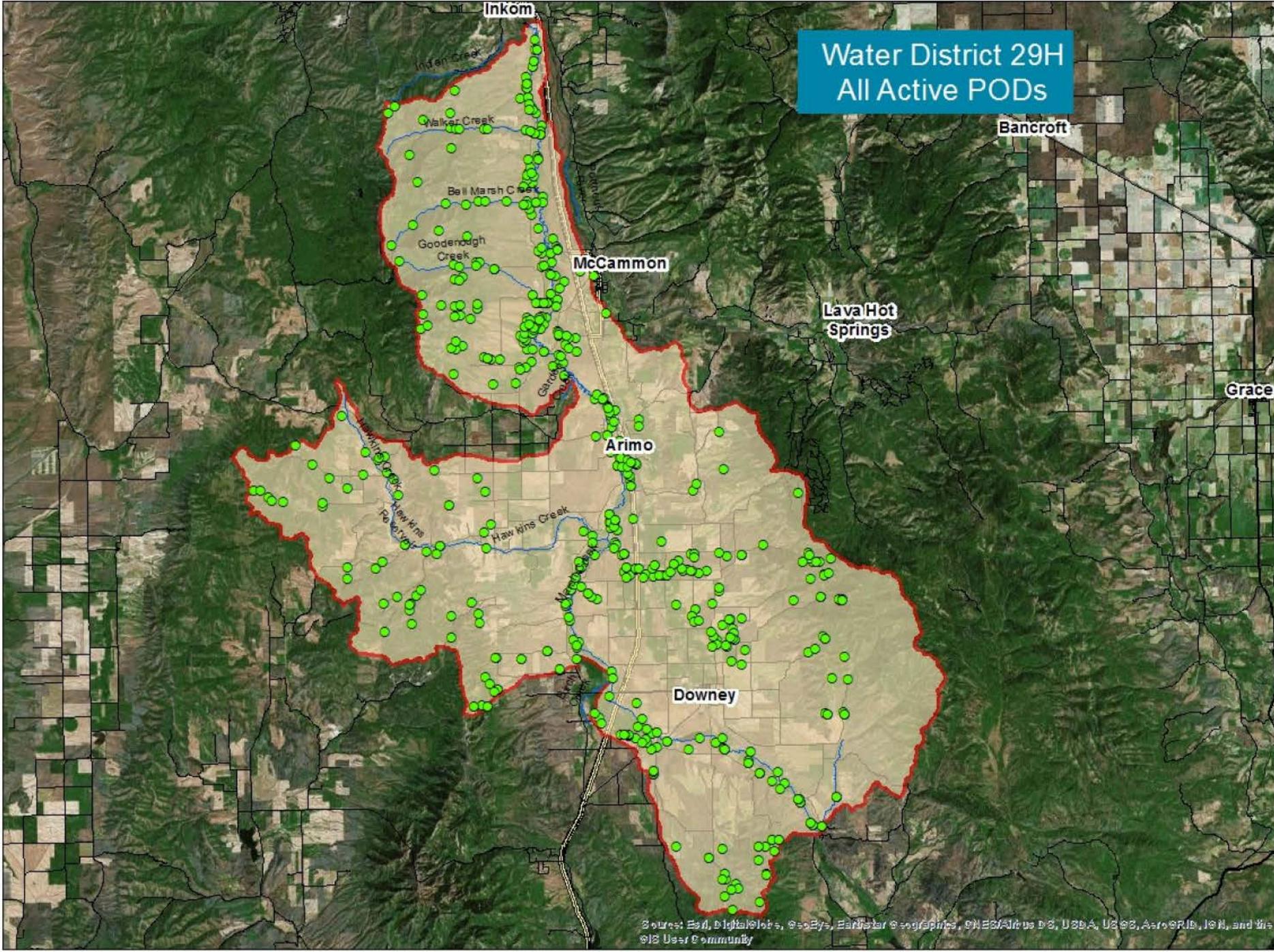
- Irrigation Use (may include other uses)
 - ≈ 250 water rights total (≈ 245 points of diversion)
 - ≈ 210 water rights (≈ 220 points of diversion) > 5 acres
 - 22 rights have sources tributary to “Sinks”
 - ≈ 37 water rights (≈ 25 Points of diversion) ≤ 5 acres
 - 5 rights have sources tributary to “Sinks”
- Non-Irrigation Uses
 - ≈ 150 water rights total (≈ 155 points of diversion)
 - ≈ 142 water rights are de-minimis Domestic and Stockwater
 - ≈ 78 of de-minimis D&S rights have sources tributary to “Sinks”
 - ≈ 8 water rights for other uses (municipal, large stock, other)
 - ≈ 4 of these rights have sources tributary to “Sinks”

* Unique diversion locations as per water rights

Potential Number of Rights & Diversions subject to Admin.

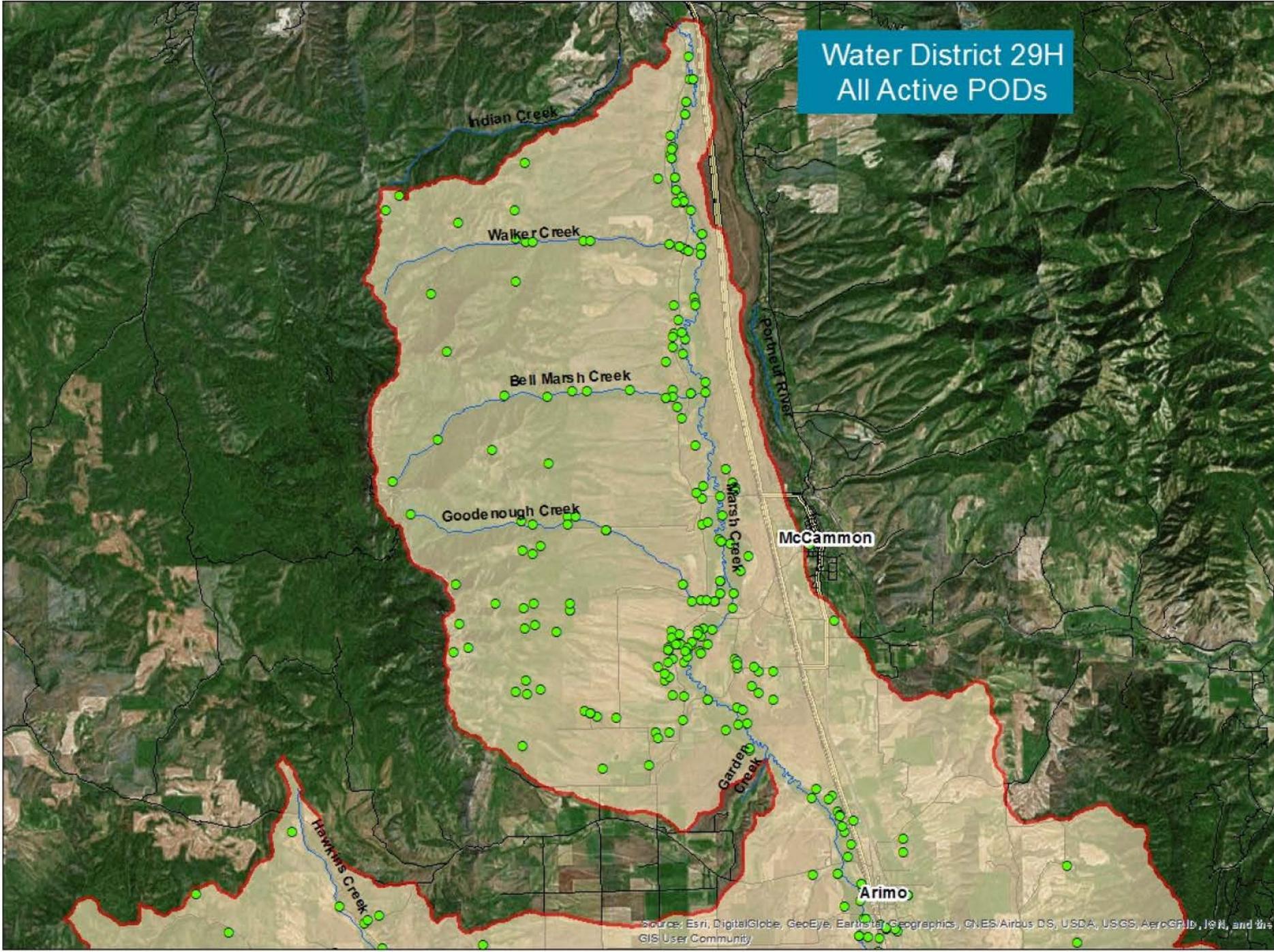
- About 227 rights & about 220 diversions total
 - include all irrigation rights and several non-irrigation rights
 - exclude de-minimis D&S rights
 - exclude rights with sources trib to “Sinks”?

Water District 29H All Active PODs



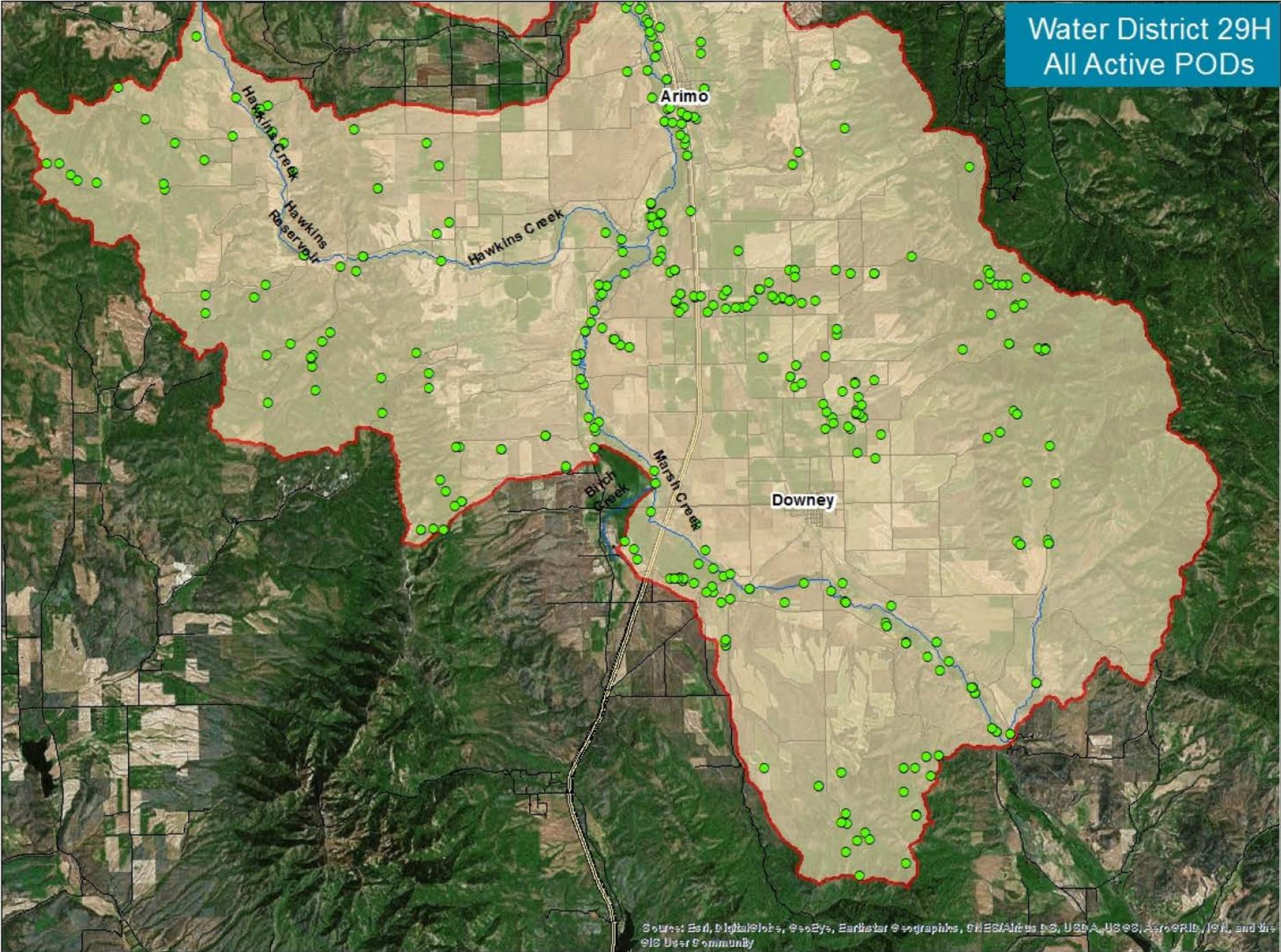
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the
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Water District 29H
All Active PODs



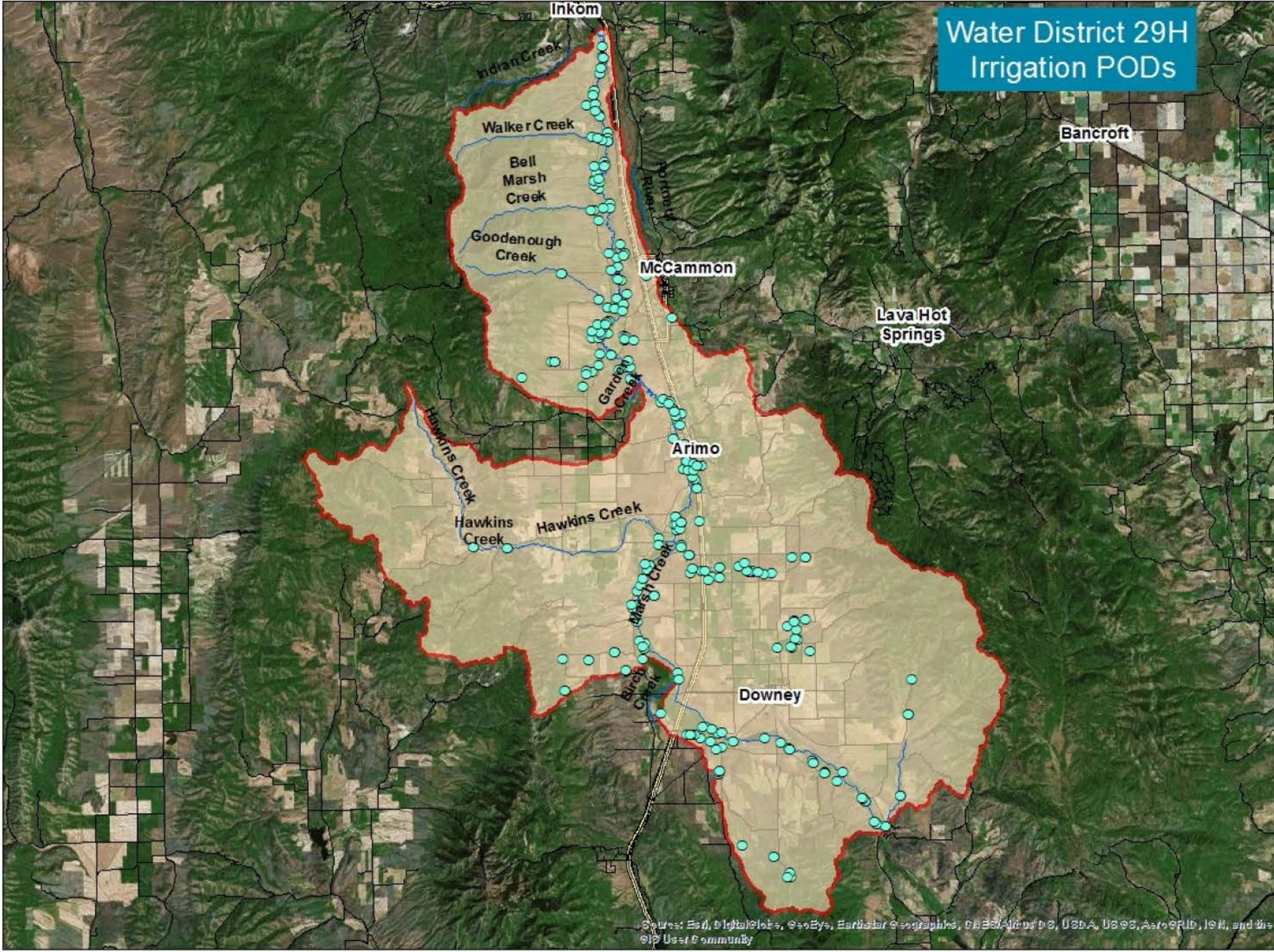
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Water District 29H
All Active PODs



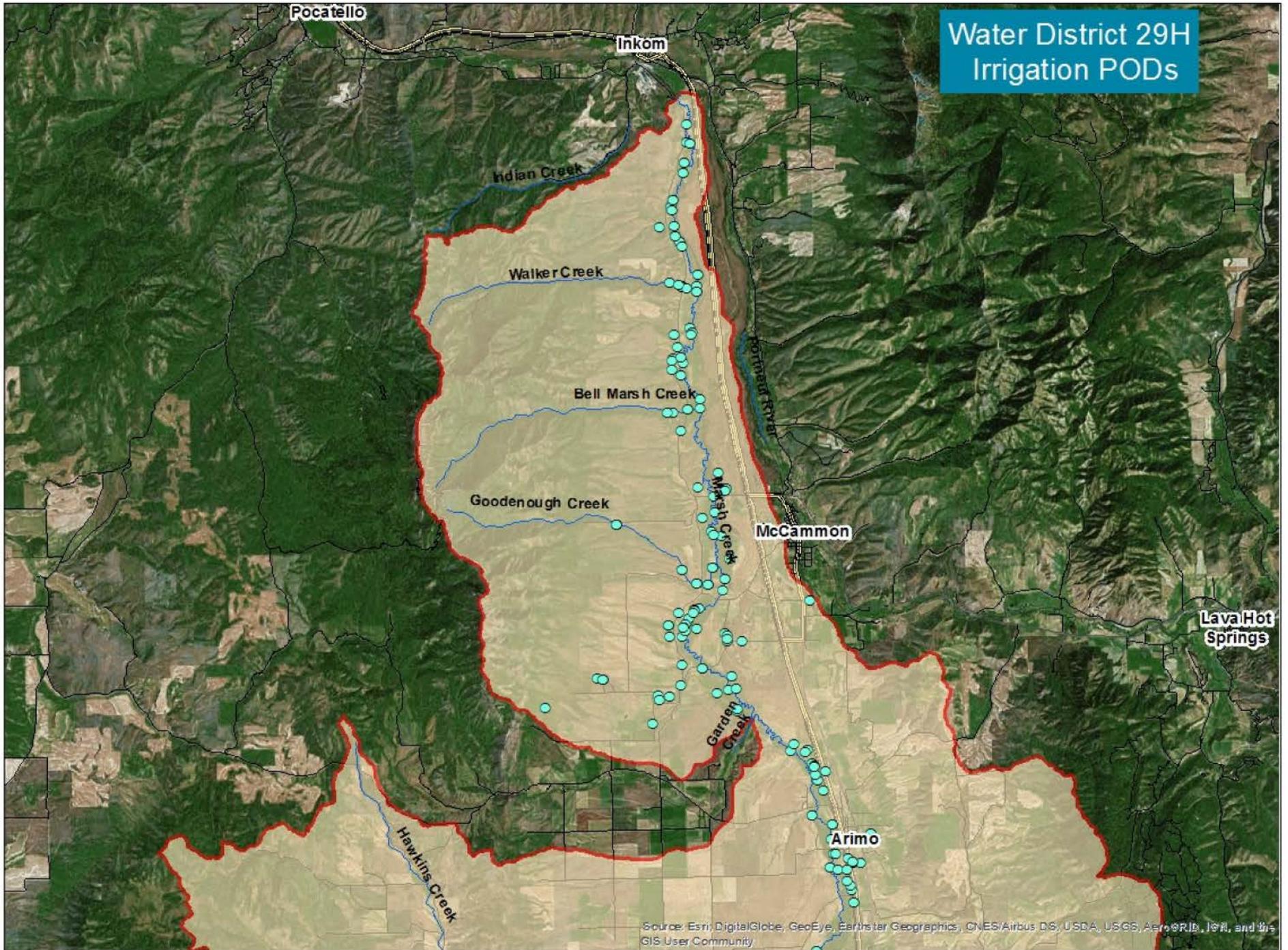
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Water District 29H Irrigation PODs



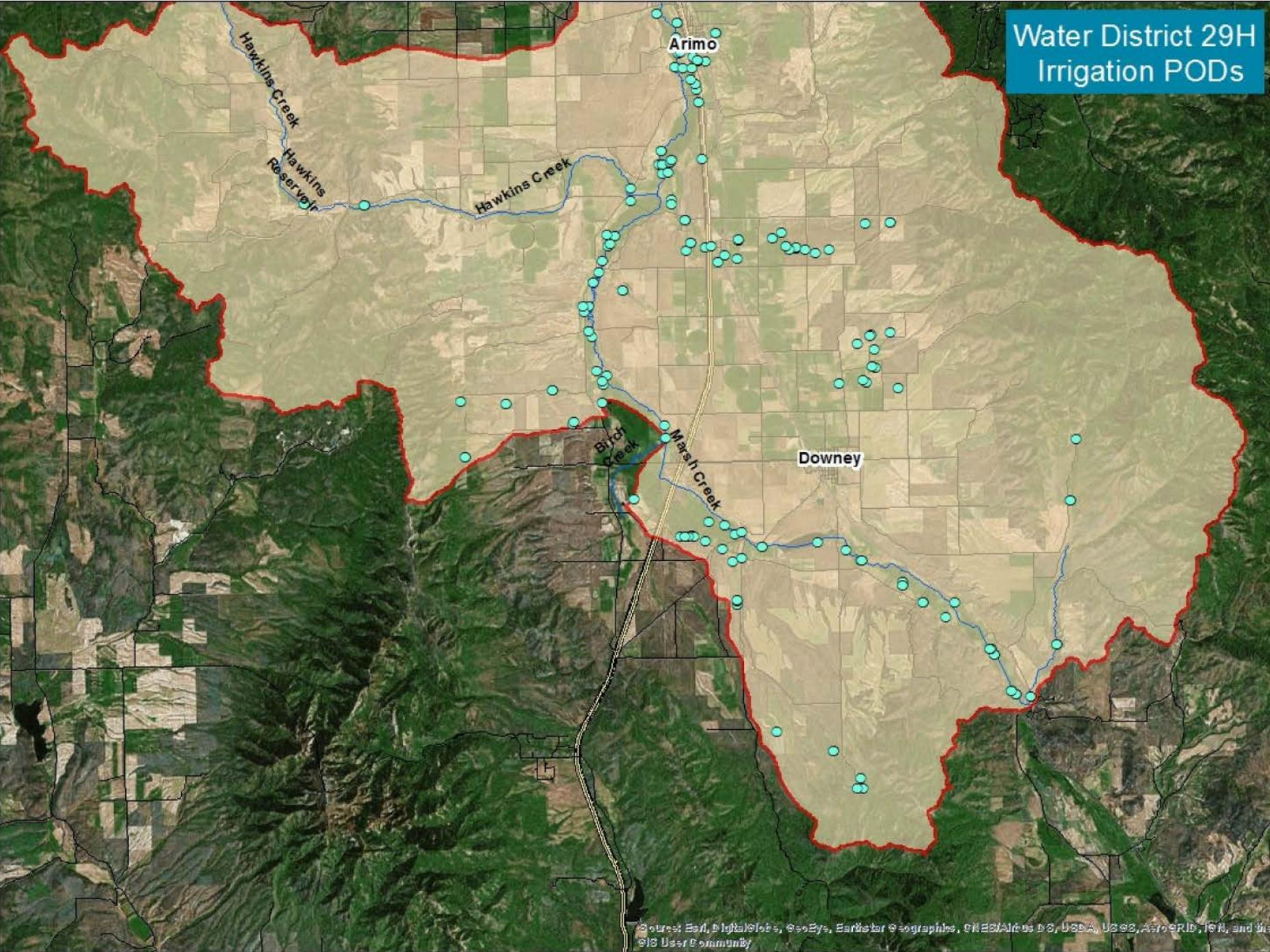
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the
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Water District 29H Irrigation PODs



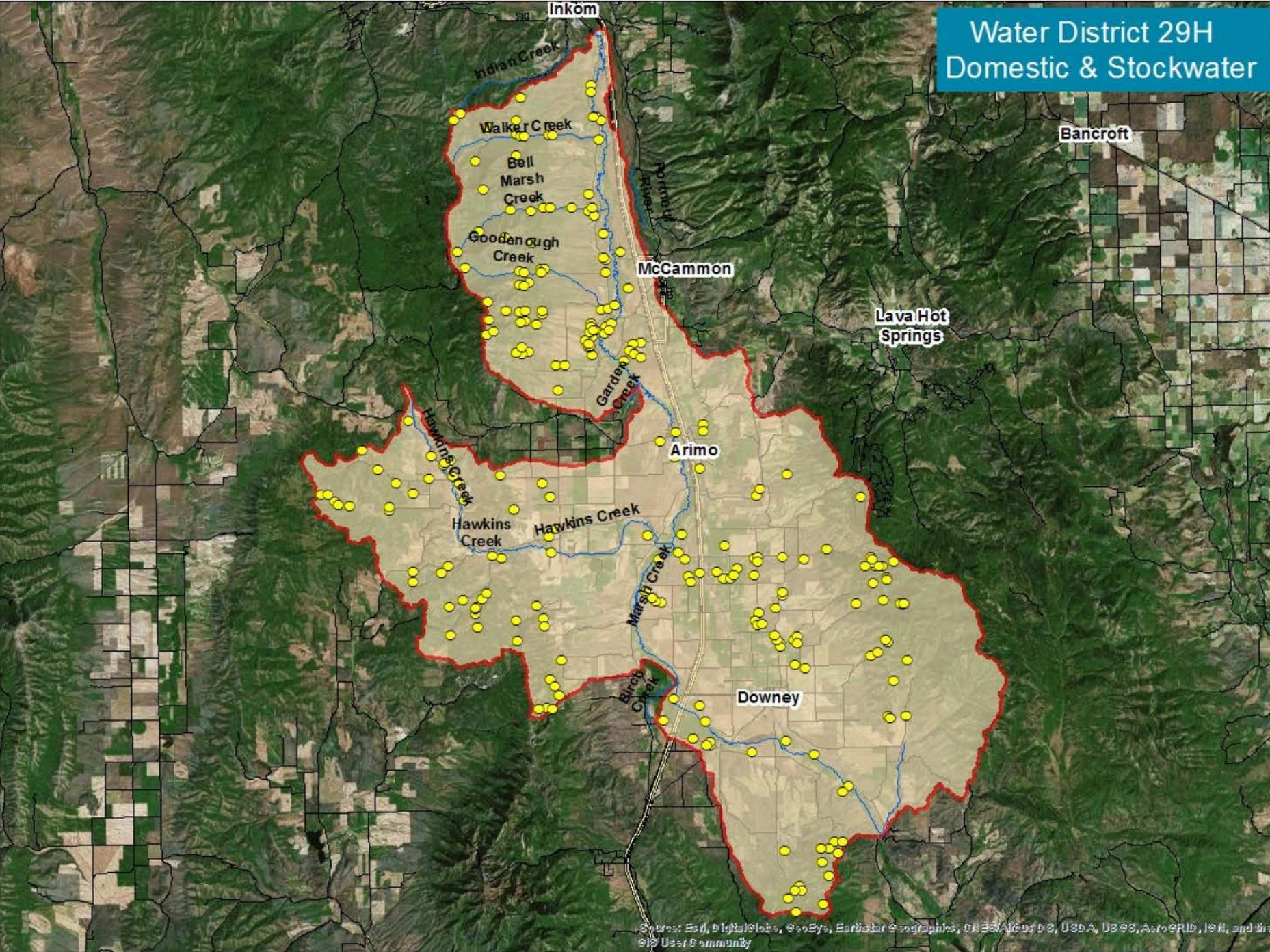
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Water District 29H
Irrigation PODs



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the
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Water District 29H Domestic & Stockwater



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the
GIS User Community

Why is IDWR Proposing Activation of Water District 29H?

- SRBA is complete
 - SRBA Court issued Final Decree – August 24, 2014
- Administration of water rights is needed, including measurement and reporting of diversions from Marsh Creek and its tributaries
- All other drainages in the Portneuf River Basin are in active water districts

Why is IDWR Proposing Activation of Water District 29H?

Continued...

- The Department has received complaints from water users in the Marsh Creek drainage concerning the lack of regulation in accordance with Idaho law
- Water rights/diversions in the Marsh Creek drainage may be diverted out of priority with respect to downstream senior priority rights on the Portneuf and Snake Rivers

Why Water District(s) are needed

- Regulation
 - proper delivery of water, includes curtailing junior priority rights as necessary
 - address unauthorized uses
 - assure diversions are within water right limits
 - measuring & reporting of diversions
- Administer/Manage water rights
 - assist IDWR with current/accurate records (ownership, diversion descriptions, transfers review)

Water Districts

Chapter 6, Title 42, Idaho Code

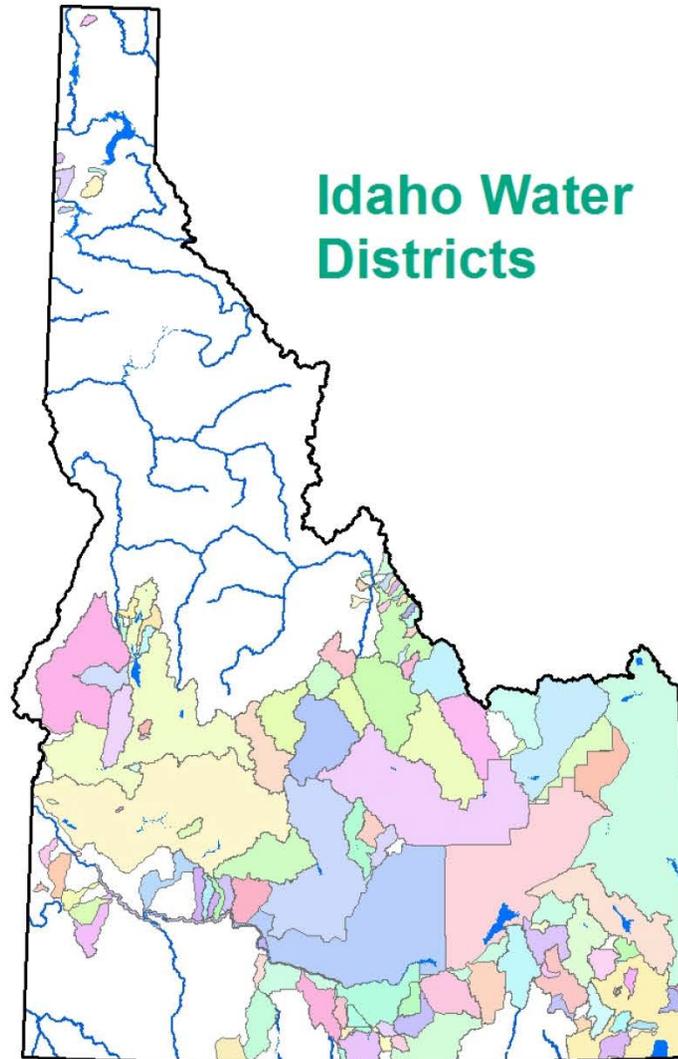
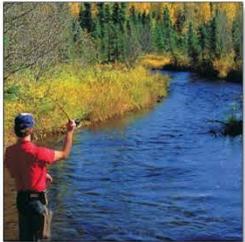
Created by order of Director of IDWR for purposes of water right administration, specifically, distribution of water from public or natural water sources in accordance with water right priority dates.

Water Districts

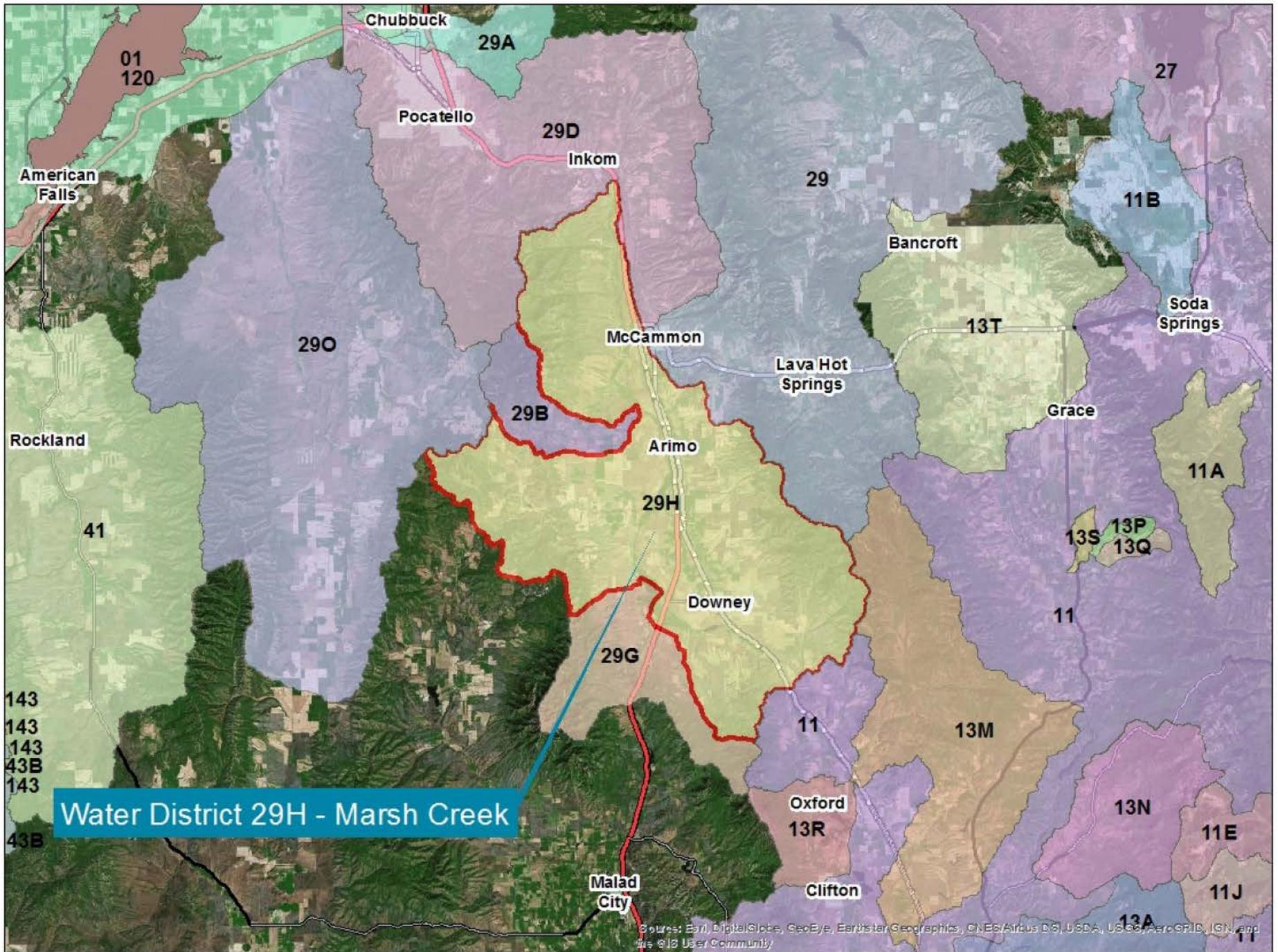
- Creation/Modification of Water Districts
 - “The director shall divide the state into water districts... such that each public stream and tributaries, or independent source of water supply, shall constitute a water district.”
 - “The director may create, revise the boundaries of, or abolish a water district or combine two or more water districts by entry of an order . . . to properly administer uses of the water resource.”

Idaho Code § 42-604

IDAHO



Idaho Water Districts



Water Districts

Features

- Watermasters elected annually to provide water distribution services
 - elected by users, appointed by IDWR Director
 - compensated by users via assessments
 - receive guidance/direction from Director
- Advisory Committee elected annually
 - comprised of water users in district
 - serve in advisory capacity to watermaster and director, draft and implement resolutions, may mediate problems within district

Water Districts

General Duties of Watermaster:

- 1) deliver water in accordance with water right priority dates
 - authority to control/regulate diversion works
- 2) measure and report diversions under water rights
- 3) provide annual reports of expenses & water delivered (watermaster report, daily log books or distribution report, proposed budget)
- 4) report and control unauthorized diversions
 - local resource/expert; review transfers

Water Districts

Meetings, Elections, Budgets

- Annual meeting held to elect watermaster, adopt a budget and resolutions, and select an advisory committee.
- Voting is by majority vote of users present, or if requested, by alternative method that involves votes equal to dollar amount assessed.

Idaho Code § 42-605

Water Districts

Meetings, Elections, Budgets

- Amount of water use is basis for assessments.
(IC § 42-612)
- Alternative methods and flexibility provided for voting and assessment of non-consumptive uses.
(IC § 42-605A)
- Budget collected either by county or by district.
(IC § 42-612 and 42-618)
- Participation is mandatory

Water Districts

Meetings, Elections, Budgets

- District meeting is first Monday of March, by law, or
- Between first Monday of January & third Monday of March, by district resolution
- Director can schedule special meeting or first meeting at any time

Water Districts

Meetings, Elections, Budgets

What Rights are included?

- All water rights are included , but for Administrative & Assessment purposes, IDWR may exclude:
 - domestic/stock water uses meeting definition of Idaho Code § 42-111, Idaho Code
 - in-stream livestock use
 - rights from sources tributary to “Sinks”, but such rights may be subject to periodic monitoring

District Measurement Requirements:

- For Measurement Purposes, may exclude:
 - irrigation uses/diversions ≤ 5 acres
 - domestic/stock water uses, in-stream livestock & other small rights/uses
- All other rights/diversions are normally measured

Measurement Requirements

Likely Scenario:

- Order to require installation of measuring devices:
 - Phase-in over one to two years
 - Submittal of measurement plans in first year
- Must install standard measuring devices as per IDWR standards
 - Open channel (weirs, flumes, doppler meters)
 - Closed conduit (magnetic flow meters)



Water Measurement

[Overview](#) [Forms](#) [Resources](#) [Research & Maps](#) [Contacts](#)

OVERVIEW

Originally created to support the measurement of ground water on the Eastern Snake Plain Aquifer (ESPA), the Water Measurement program now functions statewide to establish, maintain, and implement state water measurement and reporting standards. IDWR works directly with [water districts](#) and [water measurement districts](#) to implement measurement requirements and programs within the state. Examples of these efforts include:

- closed conduit and open channel measurement methods
- diversion and control works for surface and ground water diversions
- automation, data logging, and telemetry of water diversion and measurement systems
- development and maintenance of reporting systems for water diversion measurements

Guidelines

Use the following guidelines and procedures to collect water measurement data and report that information to IDWR. Using these procedures provides a uniform measuring and reporting method within the State of Idaho, including within water districts. The information below also assists in measuring and reporting diversions pursuant to various water measurement orders issued by IDWR.

 [Minimum Acceptable Standards for Open Channel and Closed Conduit Measuring Devices](#)

 [List of Approved Closed Conduit Flow Meters](#)

 [IDWR Water Measurement and Reporting Guidelines](#)

ESPA Measurement Order

 [Final Order on Reconsideration Requiring Measuring Devices for Ground Water in Water Districts 31, 34, 100, 110, 120, 130, and 140 - July 22, 2016](#)

 [Administrative Actions](#)

Helpful Links

[Water Districts](#)

[Water Measurement Districts](#)

[Water Rights Accounting](#)

[Eastern Snake Plain Aquifer Model](#)

[42-701 - General statutory requirement for water measurement and reporting in Idaho](#)

Water Measurement Methods

- Types of Flow

- 1) Open-channel

- 2) Closed-conduit

pressurized pipes

- Types of Devices

- 1) Weirs

- 2) Flumes

- 3) Submerged orifices

- 4) Other

- Types of Devices

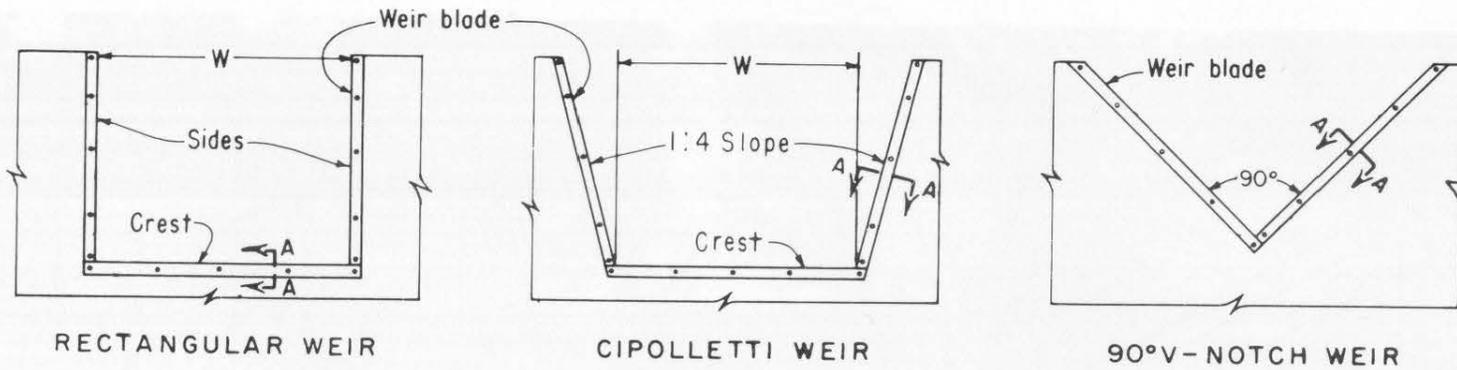
- 1) Mag Meters

- 2) Other

Measurement Requirements

Costs:

- Open Channel
 - Range from several hundred dollars to \$10,000 depending on size
- Closed Conduit
 - Mag Meters: \approx \$2,000 – \$3,000 for 10 inch line + install
 - For larger diameter pipe: Mag cost varies on diameter
Ultrasonic meter \approx \$3,500 with display, minimal install



STANDARD CONTRACTED WEIRS
(UPSTREAM FACE)

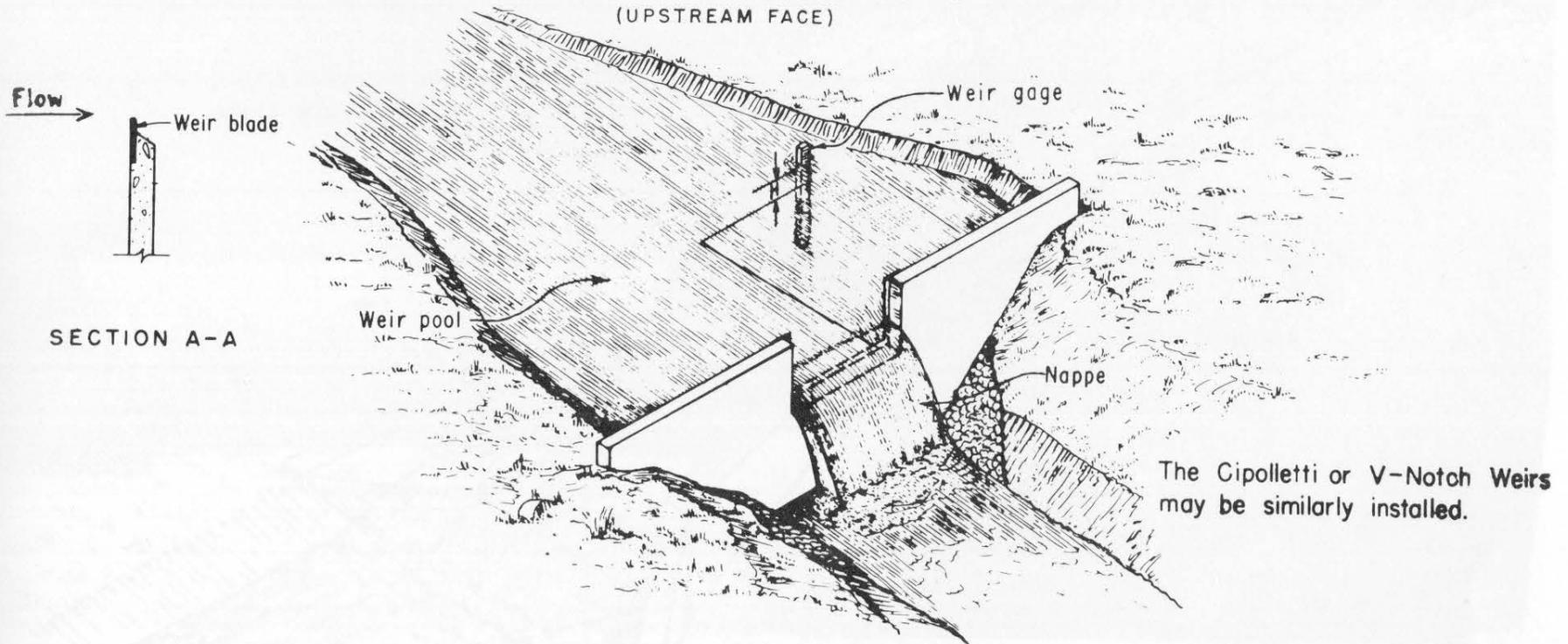


Figure 5-13. Standard contracted weir discharging at free flow. 103-D-1234

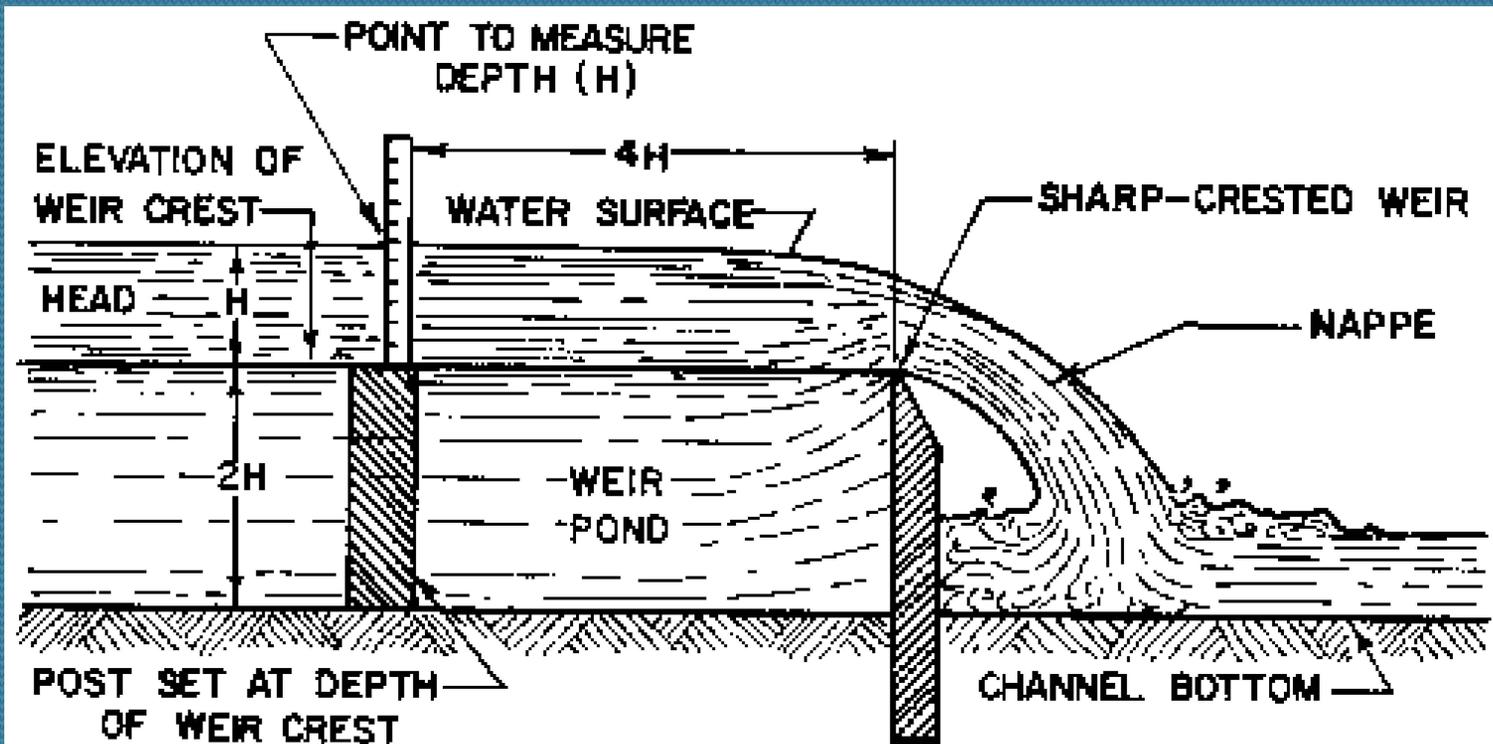


FIGURE 1.—PROFILE OF A SHARP-CRESTED WEIR





Parshall Flume





WD 29H Timeline - Next Steps

- Organize a Steering Committee and hold one or more meetings as necessary: mid to late March
- Schedule annual meeting date & mail individual notice of annual meeting
- Hold annual meeting late April/early May

Annual Meeting

- Elect watermaster
- Adopt Budget
- Select advisory committee
- Adopt operational resolutions

District Operation and Budget Considerations:

- Watermaster duties 2017:
 - Inventory diversions
 - Respond/address any complaints
 - Work with committee, IDWR and users on measuring device implementation
 - Ownership changes, review transfers

District Operation and Budget Considerations:

- Budget for compensation of water master, secretary/treasurer, equipment
 - Compare with budgets from similar sized water districts?

Requirements of District & Watermaster

- Maintain office/home contact/presence
 - Phone, vehicle, computer access
- Min. PC/communication requirements
 - cell, fax, DSL or other broadband link
 - basic computer skills
 - other PC experience helpful
 - GPS, GIS, billing, spreadsheets

Advisory Committee

- Work with IDWR next one to two years on:
 - ✓ Implement measurement requirements
 - ✓ Future water district budget & resolutions
 - ✓ Shaping of Water District

Questions and Discussion?

