



***Welcome to the State Water Board's  
Updating Water Rights Data for California  
(UPWARD) Webinar***

*We will start shortly.*

# *Updating Water Rights Data for California (UPWARD) Webinar*

State Water Board Staff



May 19, 2023

# Webinar Overview

- Who is here?
- Help: [UPWARD@waterboards.ca.gov](mailto:UPWARD@waterboards.ca.gov)
- Opening Remarks
- Presentation:
  - History & Challenges of California's Water Rights Data Systems
  - Solutions for Modernizing Water Rights Data
  - Project Overview
- Questions & Comments



# *Updating Water Rights Data for California (UPWARD) Webinar Opening Remarks*



May 19, 2023

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# *Water Rights Modernization and UPWARD Overview*

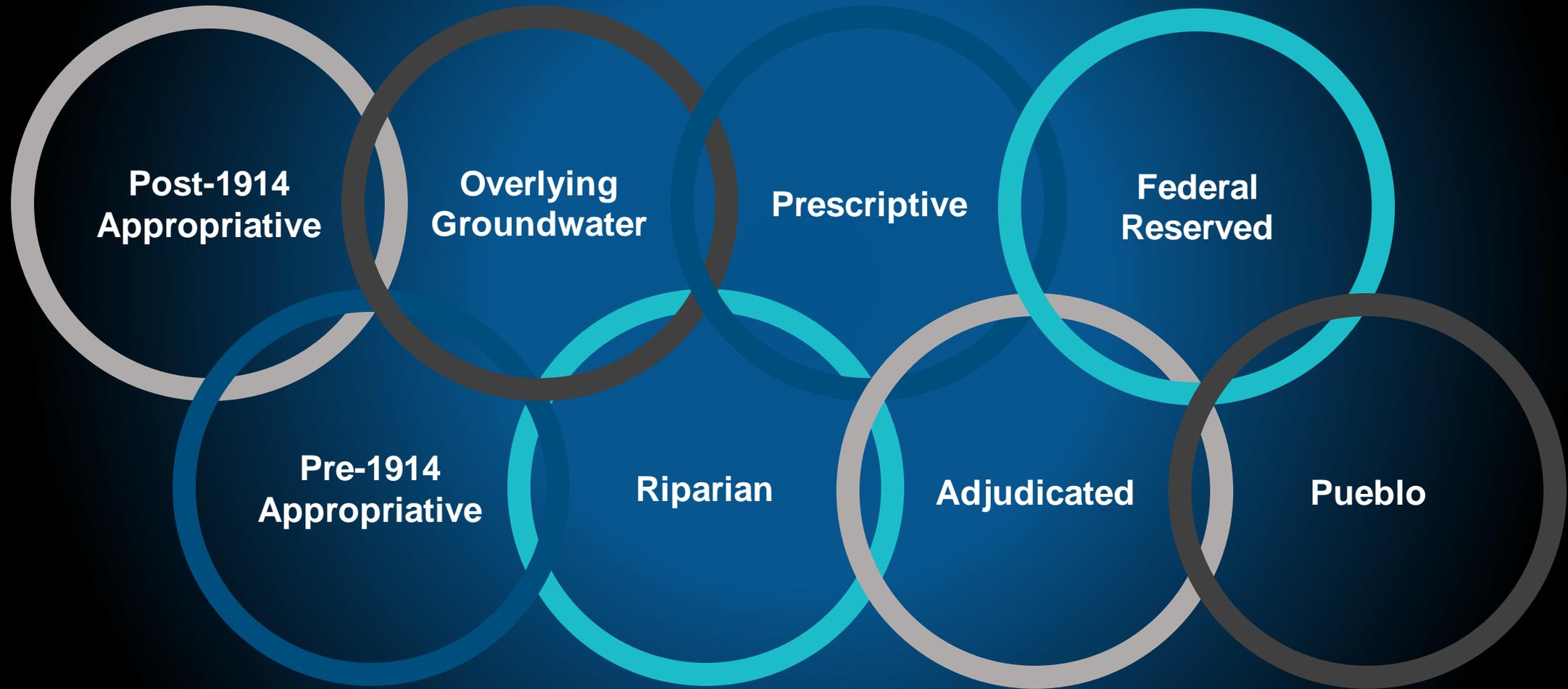
**State Water Board**

Brent Vanderburgh & Jeff Parks



May 19, 2023

# Complexity of California Water Rights Data



# Existing Challenges

## Data needs change over time

- eWRIMS was designed for fees (little focus on water accounting)
- Minimal guidance for reporting
- Limited QA/QC when reporting (e.g., inconsistent units)
- System documentation isn't up to date
- Can't collect real-time water use data
- Hard to update as regulations and policies change



# Existing Challenges

Technology has changed quickly – so has the Division of Water Rights

**1990s**

**WRIMS  
Database  
(<100 staff)**

**Applications, Permits, Enforcement**

**Other  
Division  
Work**

# Existing Challenges

Technology has changed quickly – so has the Division of Water Rights

<b>1990s</b>	<b>WRIMS Database</b> (<100 staff)	<b>Applications, Permits, Enforcement</b>	<b>Other Division Work</b>
<b>2006</b>	<b>eWRIMS Database</b> (120 staff)	<b>Applications, Permits, Licensing, Enforcement</b>	<b>Other Division Work</b>

# Existing Challenges

Technology has changed quickly – so has the Division of Water Rights

**1990s**

**WRIMS  
Database**  
(<100 staff)

**Applications, Permits, Enforcement**

**Other  
Division  
Work**

**2006**

**eWRIMS  
Database**  
(120 staff)

**Applications, Permits, Licensing,  
Enforcement**

**Other  
Division Work**

**2023**

**UPWARD  
Project**  
(250 staff)

**Applications,  
Permits, Licensing,  
Enforcement**

**Other Division Work**

# Existing Challenges

## Paper records



# Modern Data for Modern Needs

## California Water Supply Strategy, p.16

*“To make a century-old water right system work in this new era, the State Water Board needs accurate and timely data, **modern data infrastructure**, and increased capacity to halt water diversions when the flows in streams diminish...*

*...The State Water Board will continue to build upon efforts started last summer (2021) with the investment of \$30 million to digitize existing paper records and rebuild the state’s water right data management system.”*

Updating Water Rights Data for California

# UPWARD

# Solutions for Modernizing Water Rights Data

- High-quality data & a modern data system
  - Thoughtful design, guidance, and guardrails to support reporters
  - GIS-based reporting of spatial features
  - Modern electronic content management (ECM)
  - Real-time water data reporting modules (e.g., for measurement reporting)
- NOT water rights reform



# UPWARD Staff

The humans behind the change...

- Water Board Staff (DGIT)
- Gartner Consulting (Advisors and lifters)
- Deloitte/Salesforce/ESRI (System Integrators)
- Public Consulting Group (IVV)
- CA Department of Technology (Project Oversight)



# UPWARD Overview

A program to streamline and improve *data* processes throughout the Division of Water Rights...



Cal-WATRS IT System (eWRIMS replacement)



Paper document digitization project



Real-time (telemetered) data collection project



Management of internal and external change

# Cal-WATRS Goals

The California Water Accounting, Tracking, and Reporting System



GIS-enabled interface



Electronic Content Management (ECM)



Real-time data collection module



Workflow dashboards

# Cal-WATRS Evolution

## UPWARD Project



Bay Delta Water Quality

Drought Emergencies

Legislation Changes

Curtailment Analysis

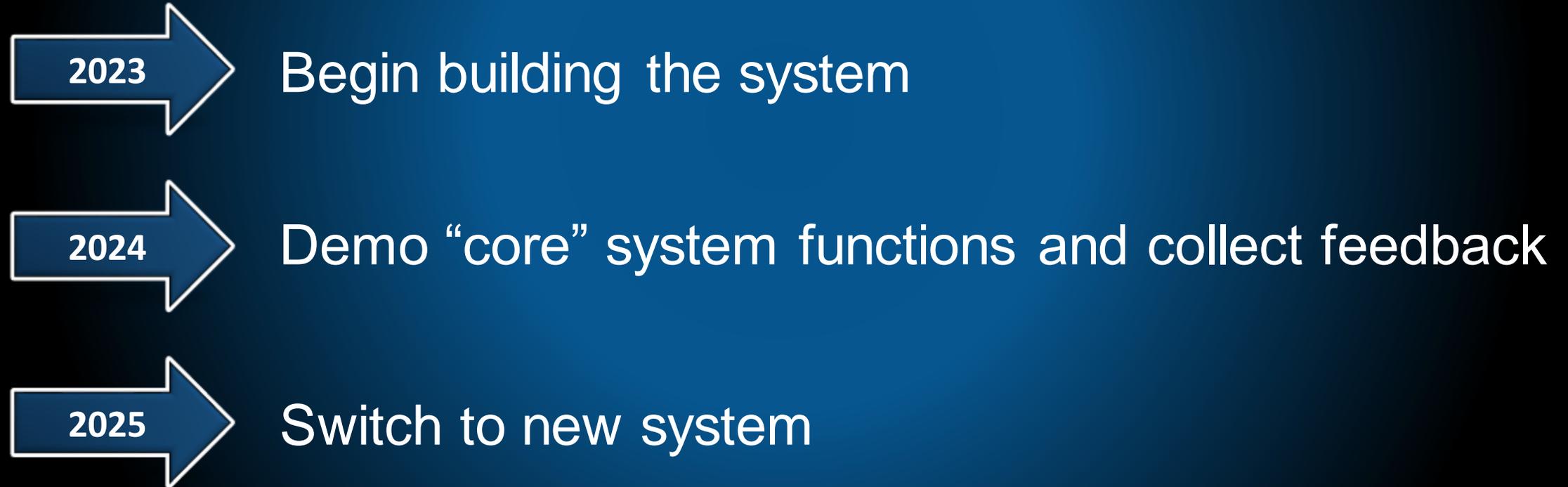
Cannabis  
Policy

Groundwater  
Recharge

# Cal-WATRS Anticipated Timeline

Funds acquired July 2021.

Deloitte/Salesforce contract signed February 2023



# What will these improvements get us?



Better data



Better decisions



Planning and management tools



Easier access for everyone



Innovative local solutions



# Ways to Engage

- UPWARD Advisory Group: [details this summer](#)
- UPWARD Website: [www.waterboards.ca.gov/upward](http://www.waterboards.ca.gov/upward)
- Email comments and questions to: [UPWARD@waterboards.ca.gov](mailto:UPWARD@waterboards.ca.gov)





# ***UPWARD Webinar Questions and Comments***

*Zoom: Raise your hand*

*Phone: Press \*9 to raise/lower your hand and \*6 to unmute*