2022 Indio Subbasin Alternative Plan Update

Workshop #1
February 20, 2020

WATER DISTRICT

COACHELLA WATER AUTHORITY & SANITARY DISTRICT
SERVICE. VALUE. QUALITY.

DESERT WATER

Indio Water Authority
Your Water Our Responsibility

Meeting Objectives

- Provide overview of Sustainable Groundwater Management Act
- Review history of water management planning in Indio Subbasin
- Describe the Alternative Plan and Plan Update approach
- Request input and feedback to support the update process

Agenda

- **Welcome and Introductions**
- Overview of SGMA
- Water Management Planning in Indio Subbasin
- Indio Subbasin Alternative Plan Update
- Public Comment
- Next Steps

Plan Update Team

- Project Consultants
  - Todd Groundwater
  - Woodard & Curran

- Indio Subbasin Groundwater Sustainability Agencies
  - Coachella Valley Water District
  - Coachella Water Authority
  - Desert Water Agency
  - Indio Water Authority

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What is the Sustainable Groundwater Management Act (SGMA)?

Landmark legislation in 2014

- Provides a framework for sustainable management of groundwater basins
- Promotes *local* management
  - With local Groundwater Sustainability Agencies (GSAs)
  - Preparing a Groundwater Sustainability Plan (GSP) or submitting an Alternative Plan
- Sets regulatory deadlines for submitting plans, reporting progress, and achieving sustainable management
- Offers State assistance
  - Funding, data, and technical support

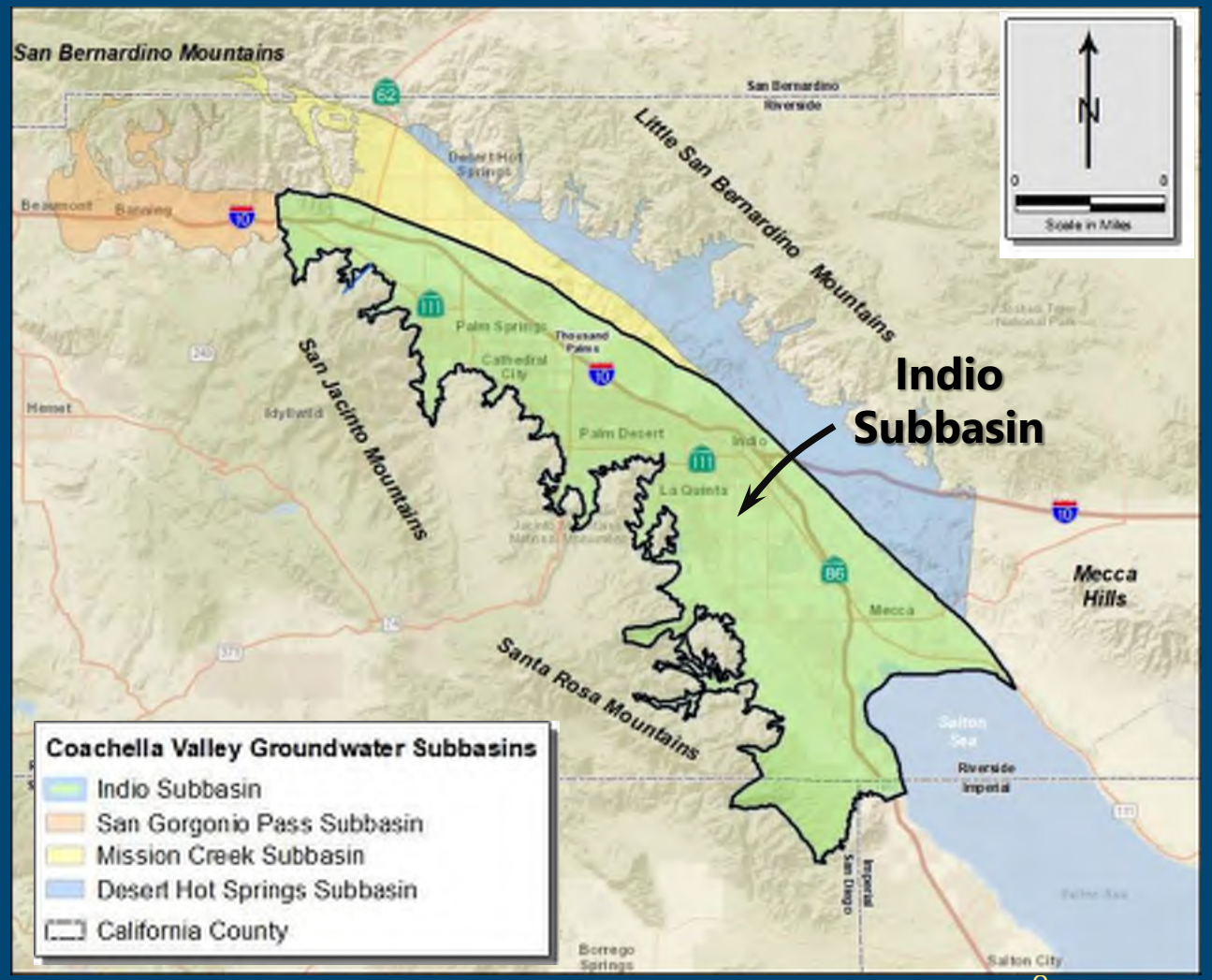
What is Sustainable Management?

Management and use of groundwater in a manner that can be maintained without causing undesirable results:

- **Chronic lowering of Groundwater Levels**
- **Seawater Intrusion**
- **Reduction of Groundwater Storage**
- **Groundwater Quality Degradation**
- **Land Subsidence**
- **Depletion of Interconnected Surface Water**

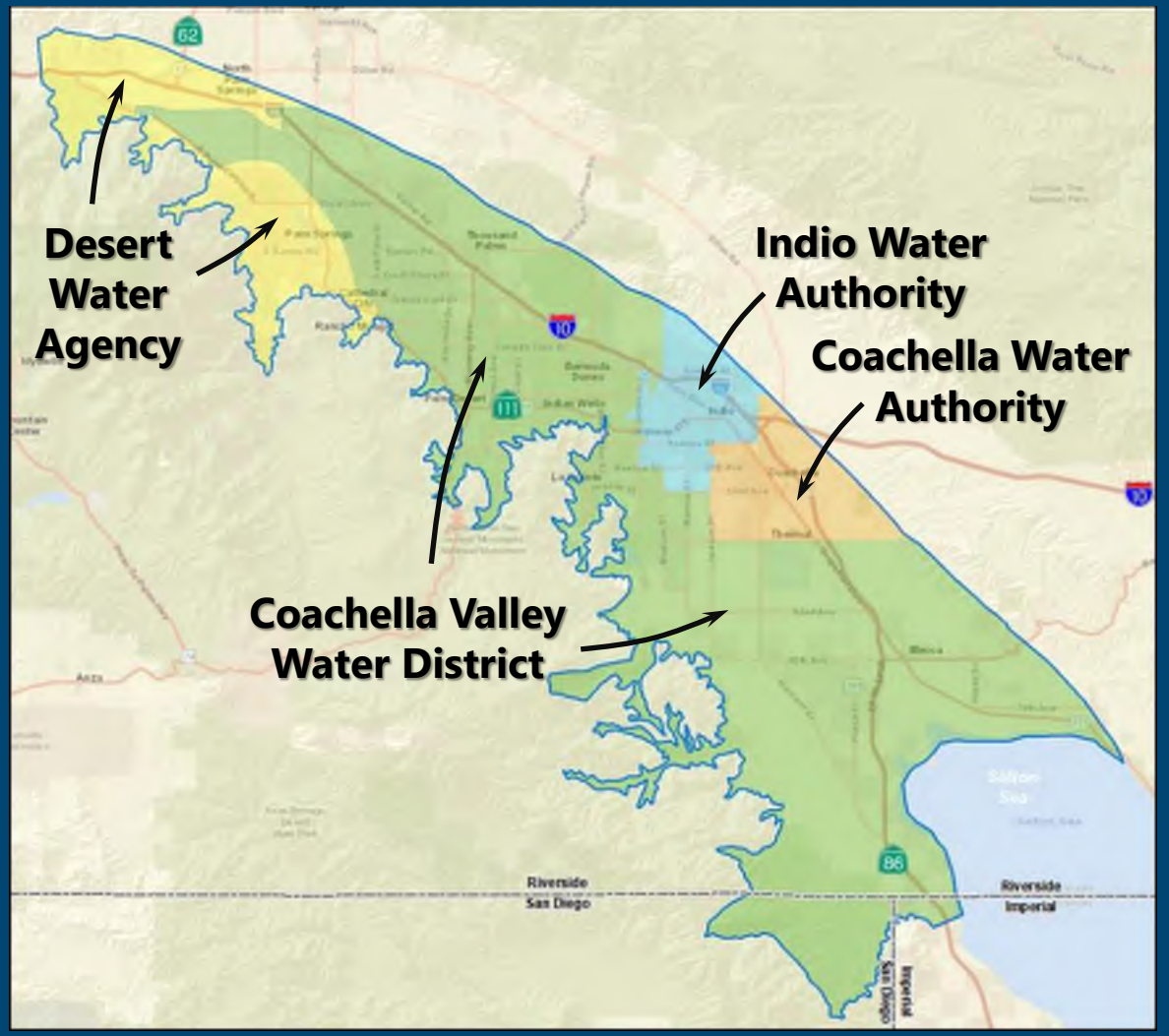
How does SGMA Apply to the Indio Subbasin?

- Defines Indio Subbasin as medium priority, thus subject to SGMA
- Recognizes existing water management plan, approved as functionally-equivalent Alternative Plan
- Recommends that GSAs quantify sustainability criteria and incorporate additional elements in Plan Update
- Requires the Indio Subbasin to be sustainably managed within 20 years

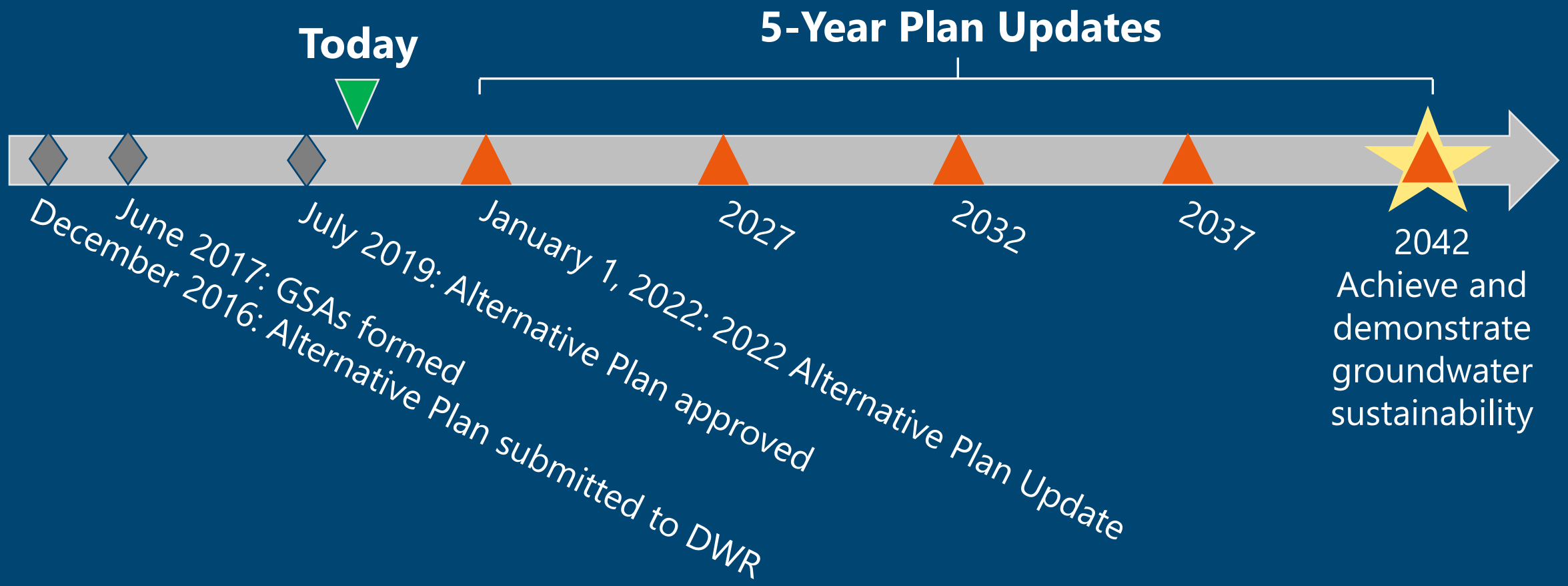


What are the Roles/Responsibilities of GSAs?

- Each GSA has responsibility and authority for water management within their respective boundaries
- Historical and ongoing cooperation
  - Memorandum of Understanding
  - Joint submission of Alternative Plan
  - Collaboration on Annual Reports and 5-Year Plan Updates



SGMA Timeline for Indio Subbasin



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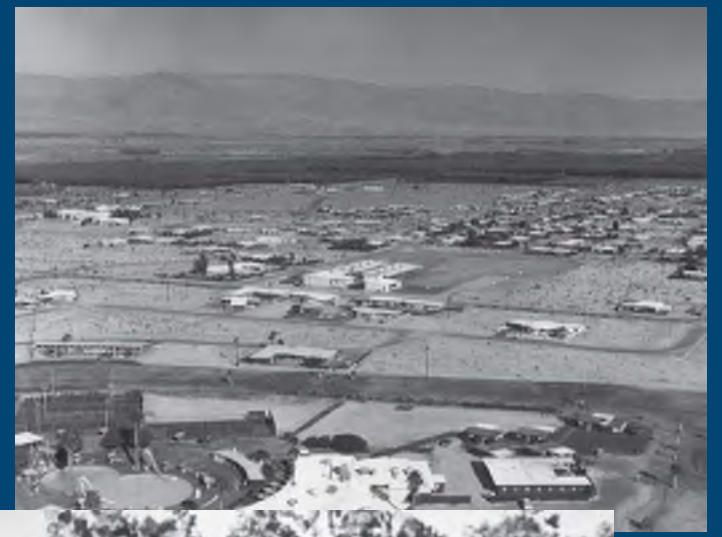
Alternative Plan Builds on a Long History of Active Local Water Management

- The history of Coachella Valley is one of agricultural and urban growth, accompanied by increasing water demand and periods of groundwater overdraft

"The existing underground water supply of the District has shown rapid depletion during the past year. The urgency of completion of a supplemental water supply is now apparent to practically all of our land owners."

Excerpt from 1945 annual report, CVCWD



Multiple Water Sources Have Been Developed to Ensure a Reliable Supply

- Capture and recharge of Whitewater River stormflows begins in 1918
- Coachella Canal completed in 1949
  - Bringing Colorado River water to support agriculture in East Valley
- CVWD and DWA contracts for State Water Project (SWP) water in 1963
  - SWP exchanged for Colorado River Water via Colorado River Aqueduct
  - Recharge at Whitewater River Spreading Grounds begins in 1973
- Water recycling begins in 1965


Coachella Canal construction


Whitewater River Spreading Grounds

Need for Water Management Planning to Balance Supply and Demand

- Coachella Valley Water Management Plan (CVWMP)
  - Initiated 1994 to ensure adequate supplies were available to meet future demands
  - 2002 Plan and 2010 Update
  - Submitted to DWR as Indio Subbasin Alternative Plan and approved in 2019
- Other Plans
  - Coachella Valley Integrated Regional Water Management (IRWM) Plan
    - 2010 Plan and 2014 Update
    - 2018 Expansion to include Stormwater Resources Plan
  - Urban Water Management Plans
    - 2015 (individual purveyors) and 2020 Update (regional plan)

What is the Alternative Plan?

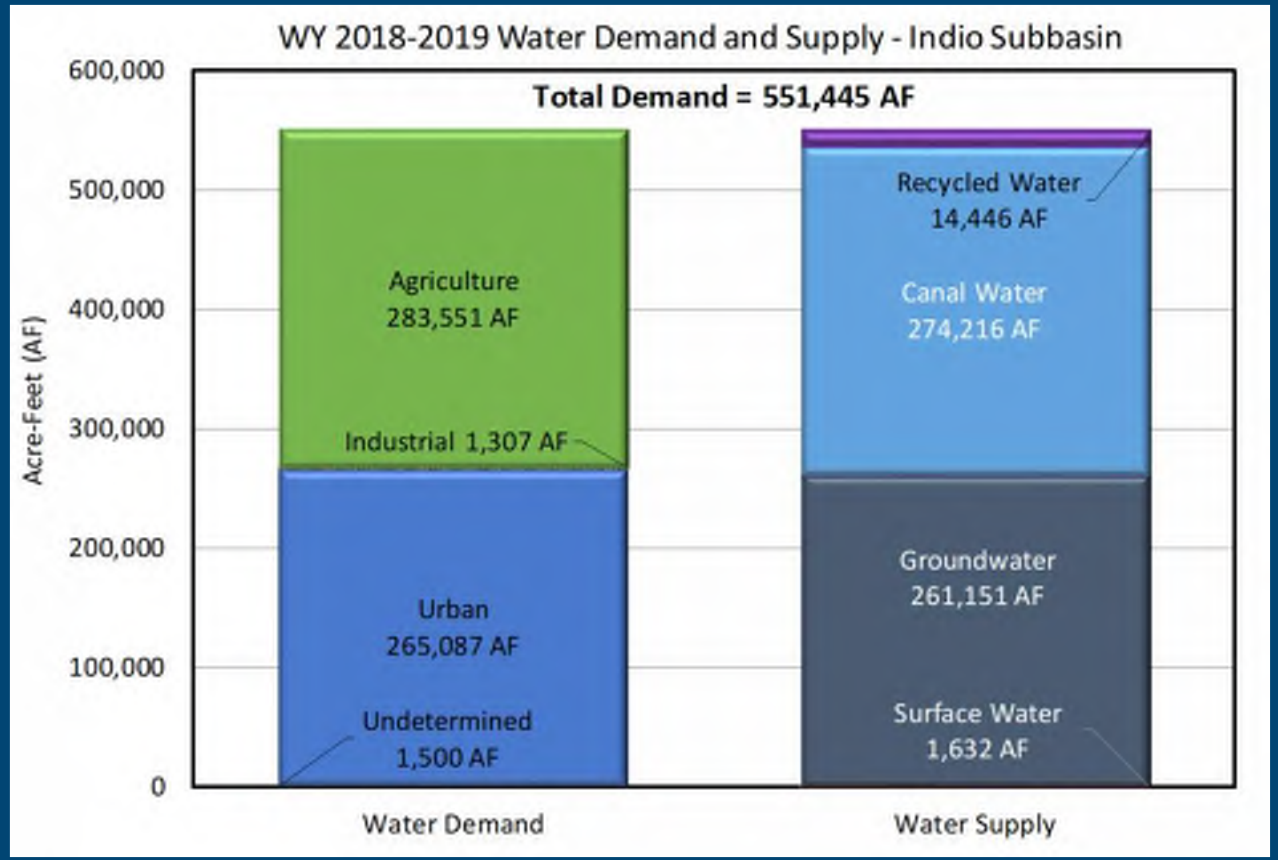
- 2010 CVWMP Update = Alternative Plan
  - Assessed future growth and land use changes
  - Estimated future water demand and supplies
  - Identified management actions needed to meet current and future water demands in a cost effective and reliable manner
  - Established data collection and monitoring programs to track groundwater conditions and Plan performance

How does the Alternative Plan Compare to a GSP?

- Shares common goal of achieving groundwater sustainability
  - Eliminating overdraft and associated undesirable results
- And supports additional objectives:
  - Maximizing conjunctive use opportunities
  - Minimizing adverse economic impacts to Coachella Valley water users
  - Minimizing environmental impacts (broader than surface water depletion)

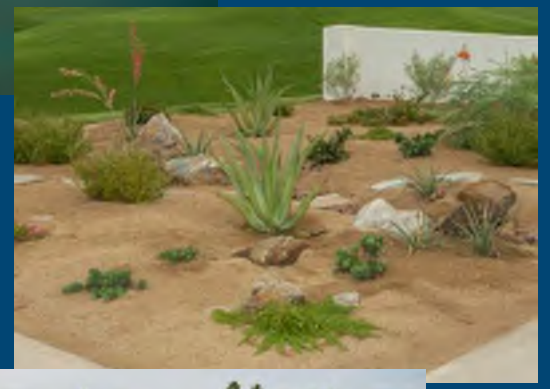
Combination of Management Actions are Essential to Meeting Local Water Demands

- WY 2018-2019 water demand: 551,445 acre-feet
- Coachella Canal water and groundwater make up most of the water supply
- Average natural recharge to the Indio Subbasin is only ~59,000 acre-feet / year (11% of total water supply)
- Imported water for recharge and other management actions are key to avoiding overdraft and undesirable results



Combination of Management Actions are Essential to Meeting Local Water Demands

- Local stormwater and imported water for direct replenishment of groundwater
- Source substitution provides non-potable water for irrigation, reducing groundwater pumping
- Agricultural, golf, and urban conservation reduces water demand



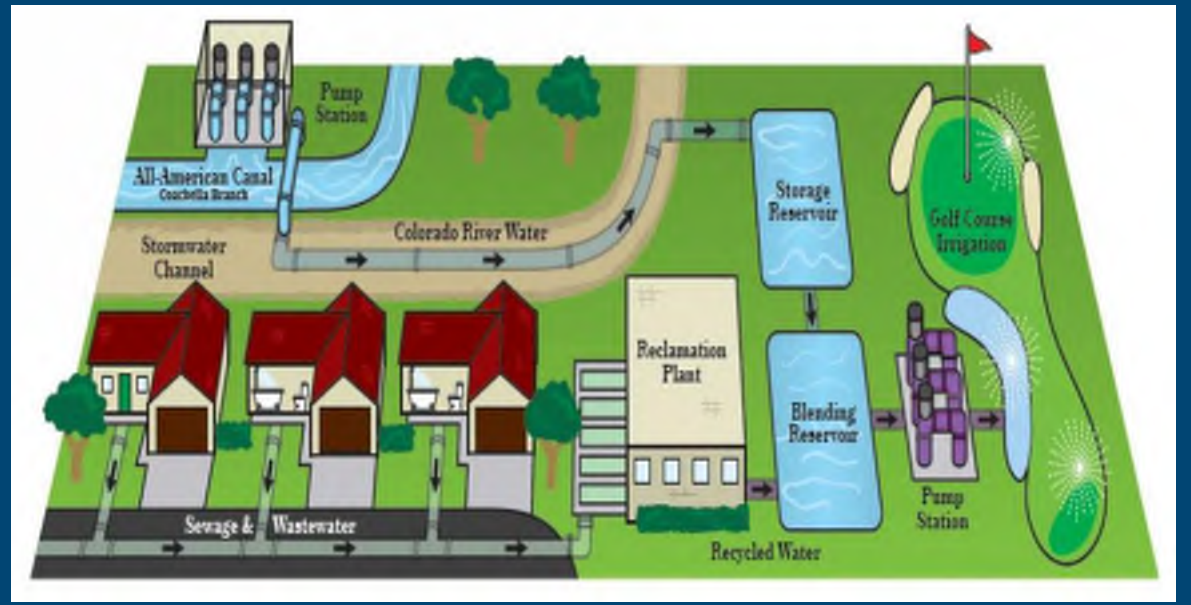
Groundwater Replenishment

- Active replenishment at three locations in Indio Subbasin
  - Whitewater River (West Valley) replenishment began in 1973
  - Thomas E. Levy (East Valley) replenishment began in 2009
  - Palm Desert (Mid-Valley) replenishment began in 2019

Palm Desert Groundwater Replenishment Facility

Source Substitution – Non-Potable Water

- Non-potable water sources
  - Colorado River water
  - Recycled water
- In WY 2018-2019
  - 85% of agricultural irrigation (240,000 AF) was supplied by Coachella Canal water
  - 52% of golf courses connected to non-potable water system

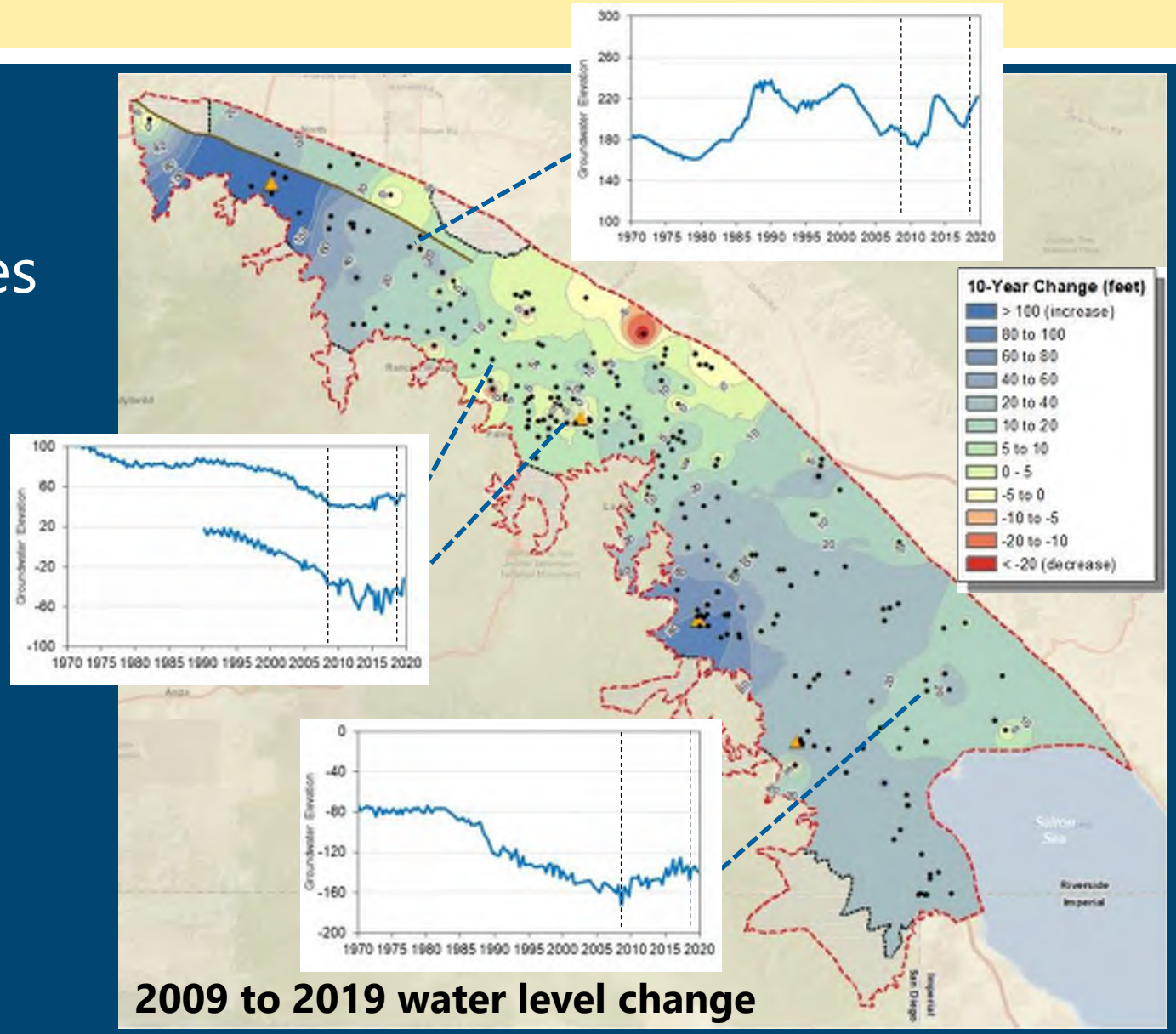


Conservation & Water Use Efficiency

- Urban conservation
  - Indoor use rebate programs
  - Landscaping rebate programs
  - Education/workshops
- Golf course conservation
  - Education
  - Recycled water
  - Collaborative tools
    - (water budgets, BMPs, ordinance appendix)
  - Desert landscaping rebate
- Agricultural conservation
  - Education
  - Flood to drip rebate
  - Soil/irrigation management assistance and training

Is the Alternative Plan Working?

- Plan implementation has resulted in significant groundwater storage increases across the Indio Subbasin
- Over the last 10 years, groundwater levels have increased regionally
- More work is planned and needed to ensure continue success of the Plan



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Plan Update – Questions to be Answered

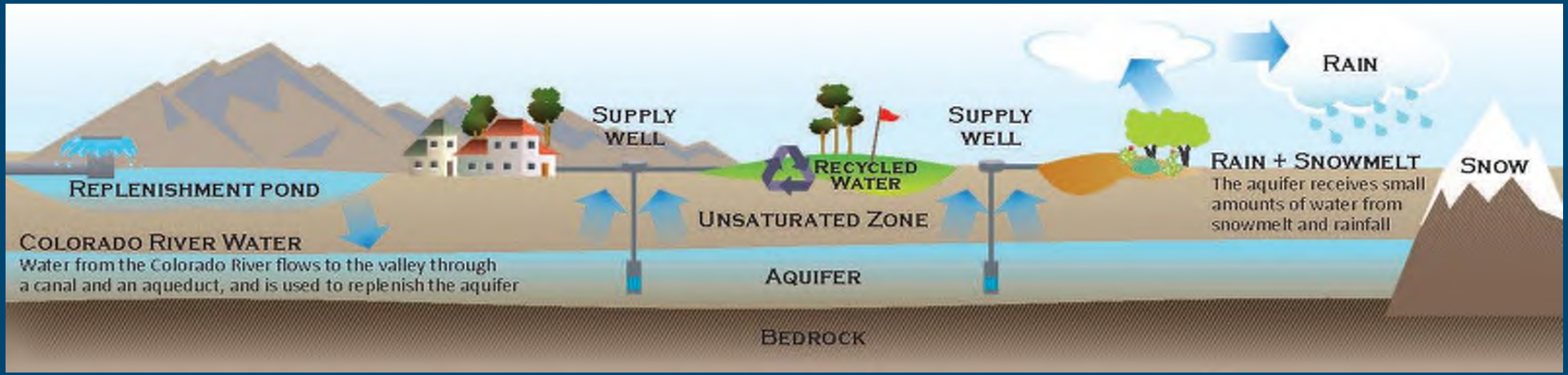
- Are predictions of population growth and water use/demand in 2010 still valid?
- What is the status of existing management actions?
- Is the current Plan implementation schedule appropriate?
- Are there any new management actions to consider?
- What new factors/conditions could affect future water demand and supplies?
- What goals and criteria are appropriate to define groundwater sustainability?

Plan Update – Tasks

1. Assess existing Plan
2. Update and process datasets
3. Document current groundwater conditions
4. Estimate future water demand and supplies
5. Evaluate management actions and update implementation plan
6. Simulate groundwater response to future conditions
7. Establish quantifiable sustainability goals and criteria
8. Assess data collection/monitoring programs
9. Develop and implement stakeholder and public outreach plan

Plan Update – Groundwater Simulations

- Update Coachella Valley groundwater flow model
- Apply model to…
  - Estimate current and future water budgets
  - Evaluate benefits of proposed management actions
  - Support selection of appropriate sustainability goals and criteria



Plan Update – Stakeholder/Public Outreach

- Four semi-annual tribal outreach workshops planned in 2020/2021
  - February and August
  - Report on progress
  - Share results and findings
  - Request input and feedback
- 2022 Alternative Plan Update Report
  - Draft Report – early Fall 2021
    - Public Review and Comment
  - Final Report – Winter 2021

Get Involved – Visit our Website

www.IndioSubbasinSGMA.org

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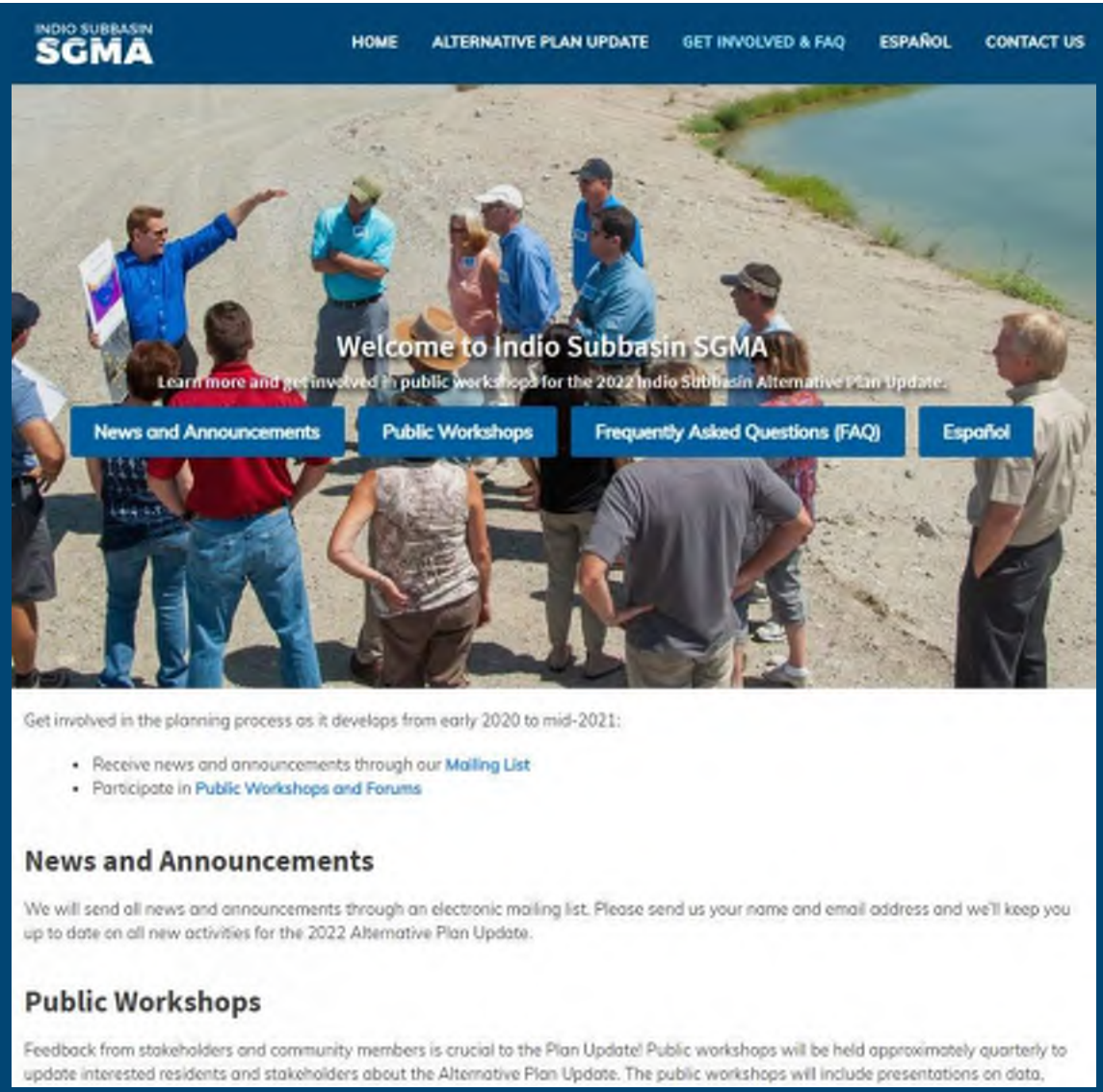
- Questions? Our website contains numerous resources related to:
  - Background on SGMA and Indio Subbasin
  - Frequently Asked Questions
  - Upcoming Meetings/Agendas
  - GSA Contacts
  - Alternative Plan Reports
- Learn more at **www.IndioSubbasinSGMA.org**



INDIO SUBBASIN SGMA

Get Involved – Visit our Website

Sign up for email invites, updates, and data/report releases at

www.IndioSubbasinSGMA.org

Your Participation and Input are Important

- Our goals are to:
  - Enhance public understanding about water resources in the Indio Subbasin
  - Keep you – the public and stakeholders – informed about the Plan Update process
  - Engage diverse interested parties and stakeholders
  - Make sure we incorporate best available information
  - Respond to your concerns

Public Comment

Input and feedback are welcomed

Next Steps

- March – May 2020
  - Finish assessment of 2010 Plan
  - Complete data collection and process datasets
  - Document existing groundwater conditions
  - Forecast future growth, land use, and water demand
- June – August 2020
  - Update groundwater model
  - Begin evaluation of management actions and projects

Next Steps

August 27, 2020

10:00 AM to 12:00 PM

Location: TBD

For additional information, please contact:

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