



# Kaweah Subbasin Water Marketing Strategy



Strategy Committee Meeting  
August 11, 2021



# Agenda

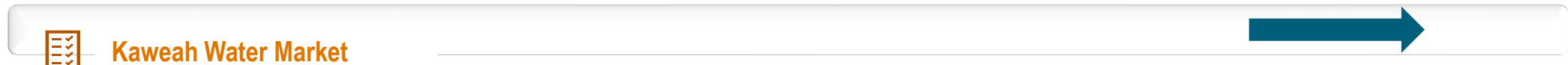
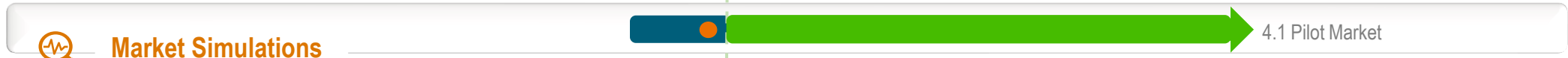
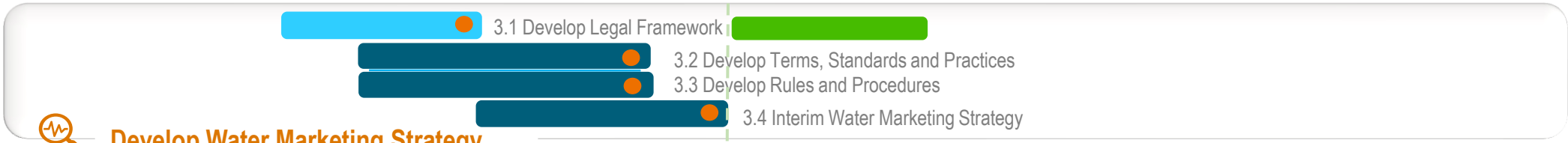
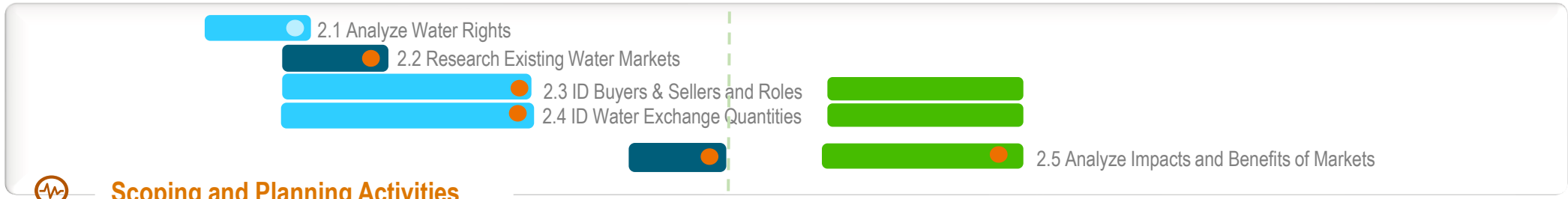
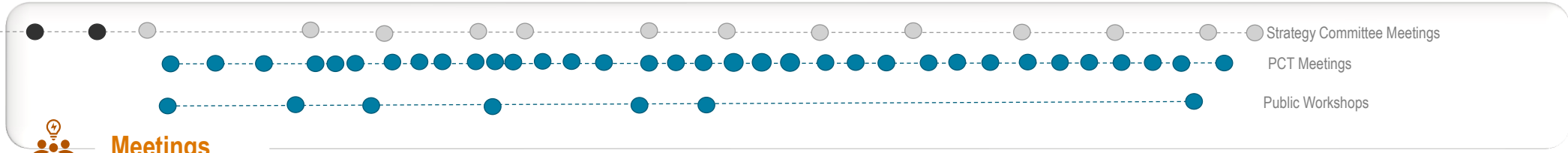
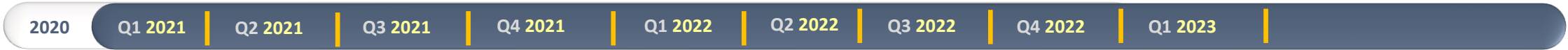
1. Introductions / Roll Call
2. Meeting Goals and Objectives
3. Public / Stakeholder Engagement
4. Task 2.2: Existing Water Markets
5. Planning for Public Workshop No. 1
6. Committee Member Reports, Updates, Other Items of Interest
7. Action Item Recap and Adjourn



# Meeting Goals and Objectives

- a. *Review Project Schedule*
- b. *Discuss Roles and Responsibilities*
- c. *Open Discussion/Q&A*

# Schedule



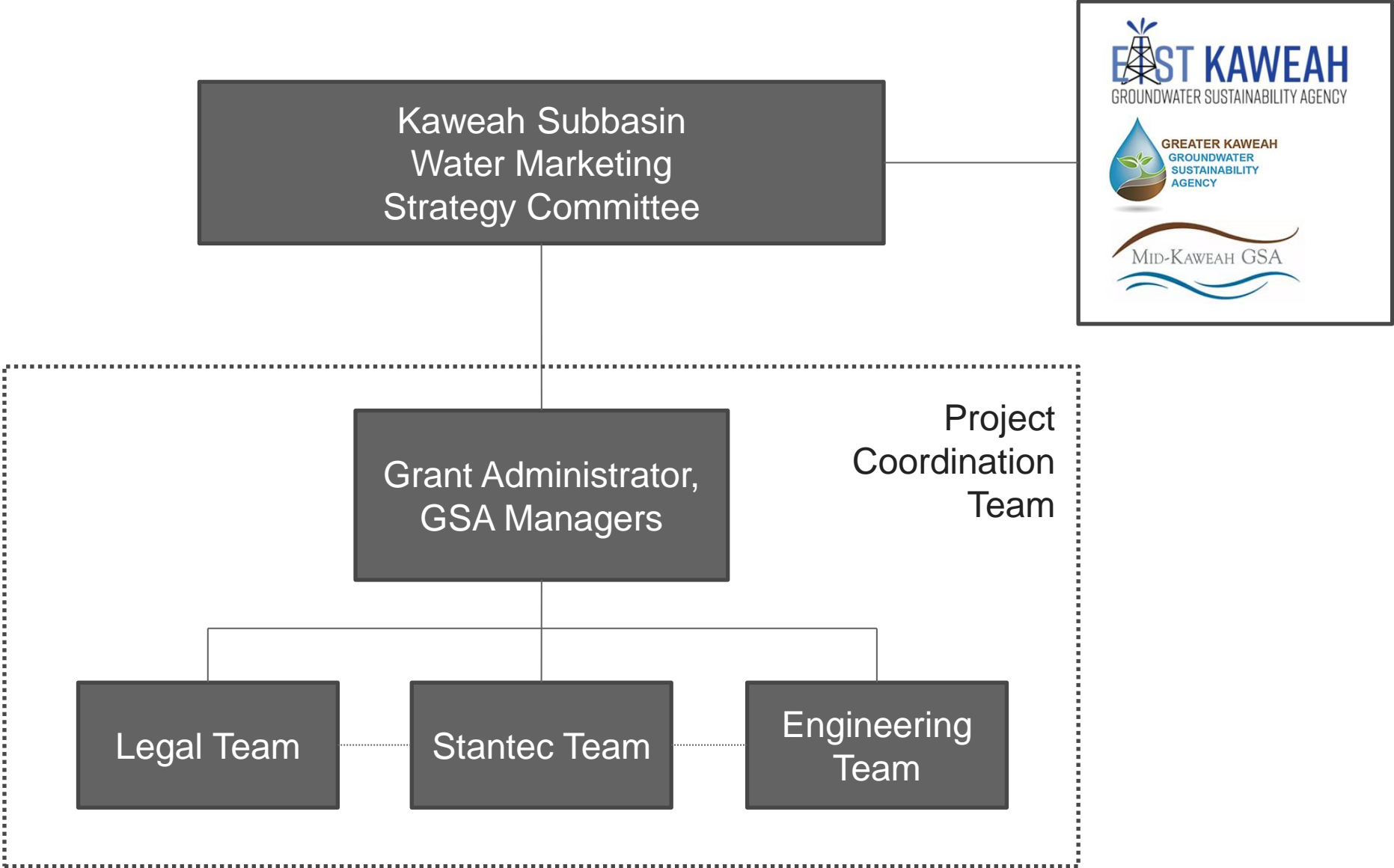
Legend:

● Stantec Team Lead

● Legal/Engineering Team Lead

● Activities completed by TID during Tasks 1.1, 1.2 and 1.3

# Organizational Framework



# Roles and Responsibilities

## **Strategy Committee and Members**

- Represent the perspectives of 11 constituencies
- Guide development of the water marketing strategy
- Make decisions on proposed water market parameters, rules and management

## **Project Coordination Team (Grant administrator, GSA managers, Technical and Legal teams)**

- Manage activities directed by the Strategy Committee
- Prepare materials for Strategy Committee for consideration
- Facilitate coordination among technical and legal teams
- Administer consultant contracts

## **Stantec Team**

- Prepare interim materials and final water marketing strategy document
- Provide timely information to Strategy Committee for consideration
- Support public workshops

## **Engineering Team (Montgomery Associates and Provost & Prichard)**

- Prepare water allocation and water accounting framework

## **Legal Team**

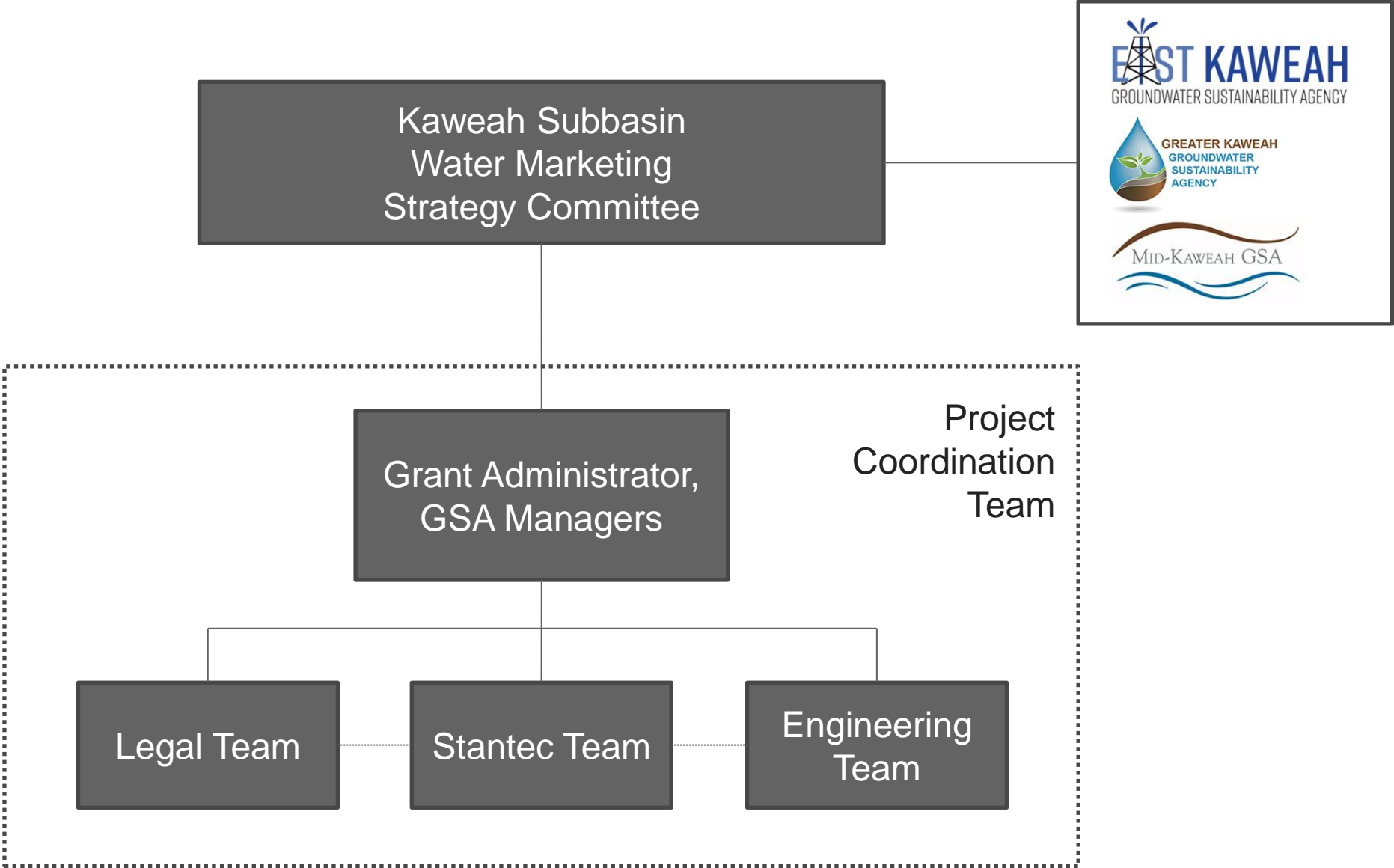
- Provide legal guidance on water supplies available for market, limitations, constraints and Strategy Committee requirements



# Public and Stakeholder Engagement

- a. *Strategy Committee and Project Coordination Group*
- b. *DWR Facilitation Support Services Program Grant Update*
- c. *Open Discussion/Q&A*

# Organizational Framework





# Strategy Committee and PCT Notification

## Setting:

- Strategy Committee is an ad hoc committee of the GSA boards.
- Ad hoc committee is not subject to the Brown Act

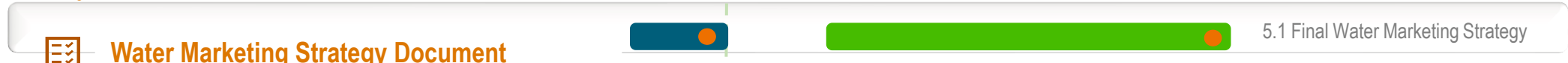
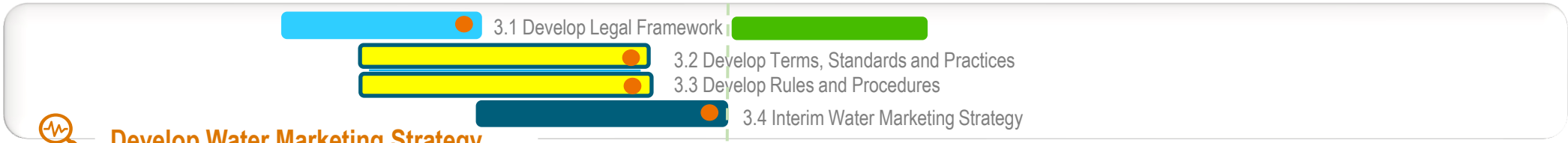
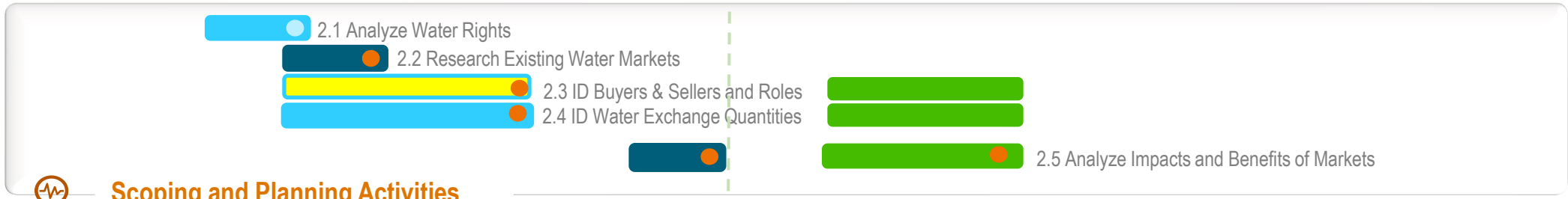
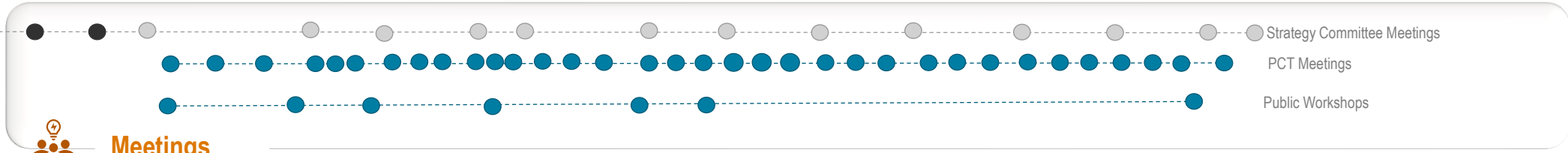
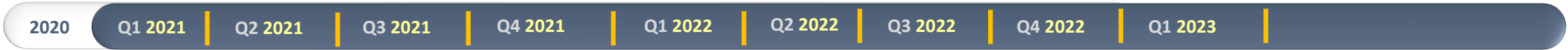
## Strategy Committee Meetings

- Noticed and conducted consistent with the Brown Act guidelines to achieve transparency
- Discussion: Record and post meetings on MKGSA YouTube Channel

## Project Coordination Team Meetings

- Discussion: Extent of public/stakeholder notification and desired level of public/stakeholder involvement

# Key Topics For Public Input



Legend:

- Stantec Team Lead
- Legal/Engineering Team Lead
- Activities completed by TID during Tasks 1.1, 1.2 and 1.3

# DWR FSS Program

## Overview

- Application-based program of the Department of Water Resources via Proposition 1 funds
- Nine service lines, including Public and Stakeholder Outreach, Targeted Outreach to Underrepresented Groundwater Users, Meeting Facilitation, and Interest-Based Negotiation
- Managed by the Sustainable Groundwater Management Office (SGMO); implementation by Stantec
- Approved task orders are managed by the applicant; invoices submitted directly to DWR

## Status

- TID recently met with DWR Regional Coordinator Amanda Peisch-Derby to request support
- This is the first implementation request of Critical Overdraft Basins
- Draft application under review and update by TID, then transmit to Peisch-Derby for initial review
- Final application to be submitted after initial review by Peisch-Derby

## Proposed Scope under FSS Program

- Project Coordination Team: Facilitation and note taking of bi-monthly meetings
- Strategy Committee: Facilitation and note taking for up to 10 meetings
- Public Workshops: Planning, facilitation and follow-up for up to 6 meetings



## Task 2.2: Existing Water Markets

- a. *Summary of Markets Researched*
- b. *Key Market Features / Decision Points*
- c. *Open Discussion/Q&A*

# Existing Water Markets

## 19 California Adjudicated Basins with Trading Institutions

Beaumont	Main San Gabriel	Santa Maria	Tehachapi
Chino	Mojave	Santa Paula	Warren Valley
Central	Puente	Scott River	West Coast
Cummings	Raymond	Seaside	West San Bernardino
Goleta	San Jacinto	Six Basins	

## Additional Markets from around the Western United States

Central Kansas Water Bank	Truckee-Carson Basin, Nevada
Edwards Aquifer, Texas	Twin Platte Natural Resource District, Nebraska
Fox Canyon, Ventura County	Umatilla Basin, Oregon
Oregon Freshwater Trust	

## Markets in other countries

Maipo River, Chile	Murray-Darling Basin, Australia
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# Existing Water Markets

- **Method of Allocation**

- Allocation Flexibility
- Unit of Trade
- Term of Transfers
- Type of Exchange
- Geographic Limitations
- Monitoring of Use
- Penalties for Overage

- SPECIAL CASE

- **Maximum Annual Extraction**

- Beaumont, Mojave

- **Highest Continuous Extraction over 5 years**

- Main San Gabriel, Raymond, Tehachapi

- **Average Annual Extraction**

- Edwards, Fox Canyon, Santa Paula, San Jacinto, Six Basins, W San Bernardino

- **Equal Share**

- Puente

- **Certified Irrigated Acres**

- Scott River, Twin Platte

# Existing Water Markets

- Method of Allocation

- **Allocation Flexibility**

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- SPECIAL CASE

## Carryover / Storage Credit

- Banking up to 25% of unused Water Right \* (Central Kansas)
- Carryover up to 100% of Annual Allocation \* (Fox Canyon, Seaside)
- Retain 75% of water saved with conservation / efficiency (Umatilla)

\* Expiration: 5 years (Fox Canyon); 10% per year (C. Kansas)

## Borrowing

- Over extract up to 10% in a given year (West Coast, Tehachapi, Central)

## Rolling Average

- 5 times annual allocation during any 5-year period (Beaumont, Santa Paula, W San Bernardino)

# Existing Water Markets

- Method of Allocation
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- SPECIAL CASE

## **One AF of pumping**

- To be used during current water year or in perpetuity

## **One AF of Surface Water**

- To be used during current water year or in perpetuity

## **One Irrigated Acre**



# Existing Water Markets

- Method of Allocation
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- Unit of Trade

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- SPECIAL CASE

## **Temporary only (1 to 5 years)**

- Central Kansas, Fox Canyon, Main San Gabriel, Scott River, Tehachapi

## **Permanent only**

- Twin Platte, Cummings

## **Temporary and Permanent**

- Most CA adjudications, Murray-Darling, Oregon Freshwater Trust

# Existing Water Markets

- Method of Allocation
- Allocation Flexibility
- Unit of Trade
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- **Type of Exchange**

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- SPECIAL CASE

## **Formal, centralized exchange**

- Agency-operated  
(Central Kansas, Maipo River)
- Third-Party Administrator  
(Fox Canyon, Murray-Darling, Twin Platte)
- Water Trust or Co-Op  
(Santa Paula, Oregon Freshwater Trust, Scott River)

## **Informal**

- Bulletin Board  
(Edwards, Murray-Darling)
- Private Contract Arrangement  
(most CA adjudications, including Mojave & Santa Paula; Murray-Darling; Umatilla)

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- Method of Allocation
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- SPECIAL CASE

## **Geographic Boundaries**

- Sub-Areas  
(Mojave, Murray-Darling, Santa Maria, Truckee-Carson)
- Special Management Areas  
(Fox Canyon)
- Buffers around municipal wells  
(Twin Platte)

## **Directional Restrictions**

- Edwards, Fox Canyon

## **Exchange Rates**

- Twin Platte

# Existing Water Markets

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- **Monitoring of Use**

- Penalties for Overage

- SPECIAL CASE

## **Metering**

- Central Kansas, Murray-Darling

## **Metering or Pump Test & Electrical Record**

- Mojave

## **Telemetric Monitoring & Automated Electronic Reporting**

- Fox Canyon

## **Annual Flyovers & Aerial Imaging**

- Twin Platte

## **Satellite Remote Sensing \***

- ???

\* See meta-analysis by Foster, Mieno & Brozovic (2021)  
*Measurement errors result in large economic losses and limit ability to mitigate impacts to the environment & 3<sup>rd</sup> parties*

# Existing Water Markets

- Method of Allocation
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- **Penalties for Overage**
- SPECIAL CASE

## **Cost of replenishment / importing**

- Beaumont, Central, Cummings, Main San Gabriel, Mojave, Six basins, W San Bernardino

## **\$2,700 per AF replenishment fee**

- Seaside

## **\$2,049 per AF surcharge**

- Fox Canyon

## **Referred to Court or Water Master**

- Puente, Raymond, Santa Paula, Scott River, Tehachapi, West Coast

# Existing Water Markets

- Method of Allocation
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- **SPECIAL CASE**

## Environmental Markets

*Oregon Freshwater Trust* and the *Scott River Water Trust* are unique in that they use market structures exclusively to secure water for nature, especially to maintain instream flows for migrating fish populations

# Existing Water Markets

- Method of Allocation
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- SPECIAL CASE

## Discussion / Q&A

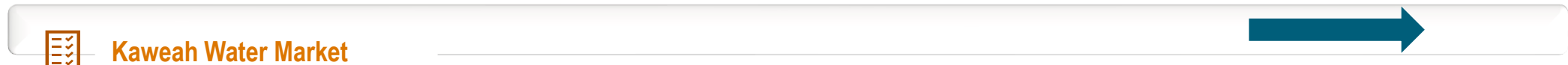
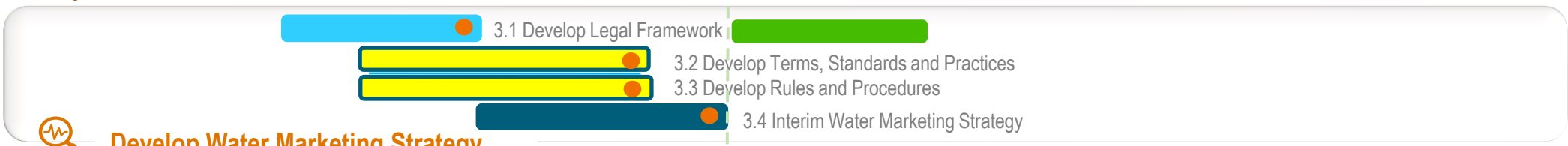
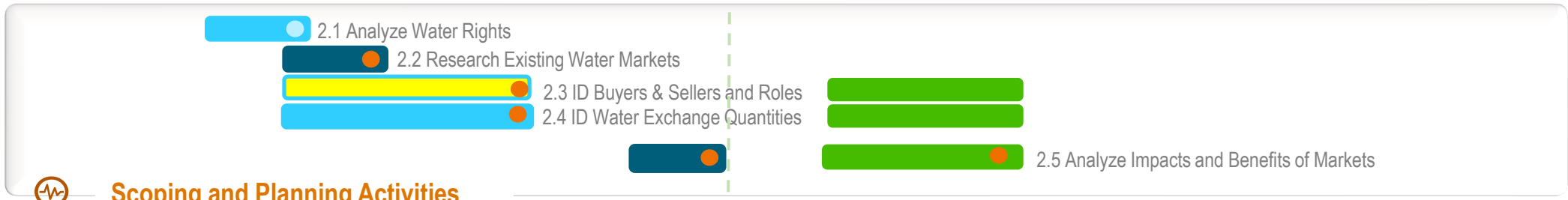
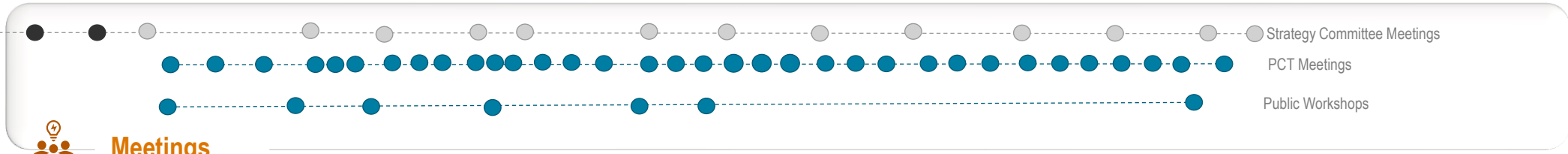
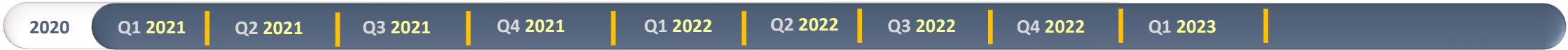


# Public Workshop No. 1

- a. *Strategy Committee: 3-5 p.m., August 25, 2021*
- b. *Public Workshop: 6-8 p.m., August 25, 2021*
- c. *Open Discussion/Q&A*



# Key Topics For Public Input



Legend:  
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# Committee Member Reports, Updates, Other Items of Interest



# Action Item Recap and Adjourn