California Water Commission

Resilient Conveyance

October 21, 2020

California WATER COMMISSION

Commission Responsibility

Action 19.4: Assess a state role in financing conveyance projects that could help meet needs in a changing climate.

Water Resilience Portfolio Context

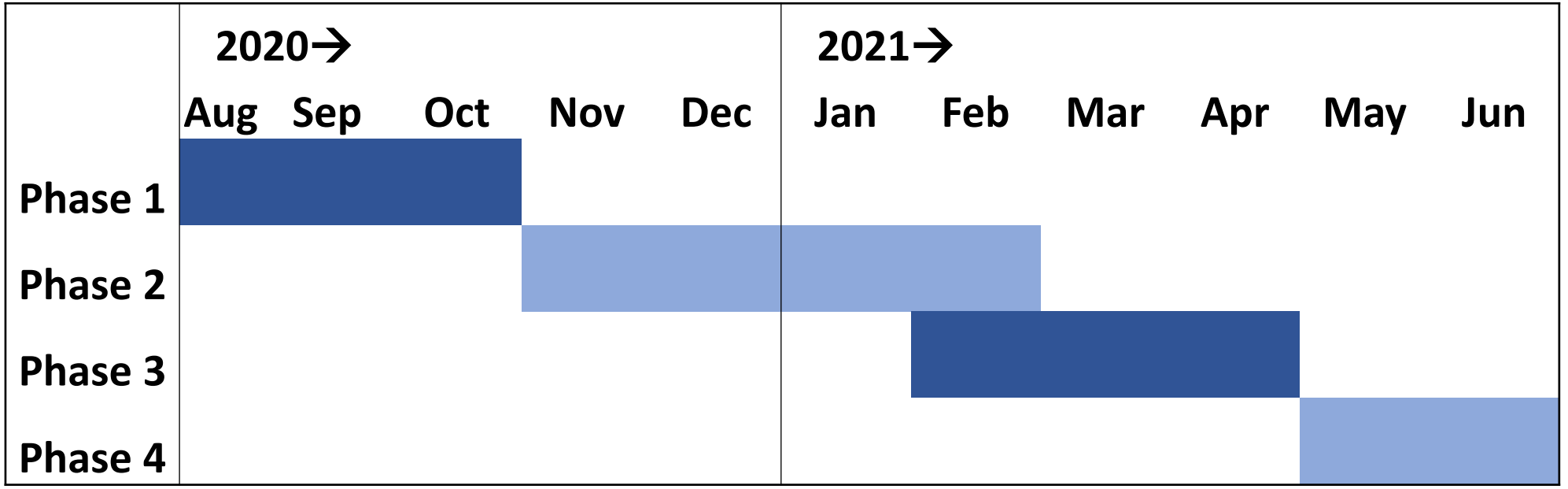
- Enable regional resilience while continuing to set statewide standards
- Invest in projects of statewide scale and importance
- Address challenges beyond the scope of any region

Work Product

- White paper & recommendations for state policymakers.

Workplan

- **Phase 1:** Staff Research and Background Document
- **Phase 2:** Gather Public Input
- **Phase 3:** Draft Paper
- **Phase 4:** Commission Approval



At This Meeting

- End Phase 1: Staff Research and Background Document
  - Discuss background policy brief (Laura)
  - Summarize interviews with key stakeholders (Lisa Beutler, Stantec)
- Start Phase 2: Gather Public Input
  - Frame overarching areas of discussion (Ellen Hanak, Public Policy Institute of California)
  - Consider intersection of resilience and conveyance (John Andrew, Department of Water Resources)

Next Steps

Phase 2: Gather Public Input

- November – February: Expert panels
- December – February: Regional workshops

Phase 3: Draft Paper

- Spring 2021

Phase 4: Commission Approval/Final Paper

- Summer 2021

Background Policy Brief

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Overview

- Organized into three sections:
  - Defining Resilience and Considering Conveyance in the Context of Climate Change
  - Determining and Assessing Public Benefits
  - Assessing Financing Mechanisms and Challenges
- Guiding questions frame considerations before Commission
  - Regional workshops and expert panels will address guiding questions
  - Questions will frame recommendations

Overarching Questions

- How can water conveyance projects augment water resilience and help meet the needs of a changing climate?
- What are the public benefits to state taxpayers that may justify state financing of conveyance projects?
- What are the advantages and disadvantages (including political challenges) associated with using various funding sources and mechanisms, and how can these mechanisms be applied to promote resilient conveyance projects?

Defining Resilience and Considering Conveyance in the Context of Climate Change

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Conveyance Need

- Aging, damaged infrastructure
- Changing hydrologic conditions
- Upgrade or improve systems to meet current/future needs

Defining Resilience

- The ability of a **system** to respond to and accommodate change, ensuring its functionality and longevity for an extended time horizon.
- By “meeting needs in a changing climate,” conveyance contributes to water system resilience
- Related terms
  - Reliability: quality of performing consistently well
  - Sustainability: ability to be maintained at a certain level

A Broad Definition of Conveyance

- Pipes and canals
- Streams and rivers
- Legal, regulatory, and policy frameworks
- Part of a water system, connecting a water source to water user based on water availability and water demand

Resilient Water System Characteristics

- Accounts for needs of environment, all humans
- Adaptable: responsive to and reliable during change/crisis
- Guided by long-term planning/thinking

- Conveyance must be itself resilient to climatic stressors
- Conveyance can promote system-wide resilience by serving larger climate response strategies

Possible Resilience Criteria?

- Durable, flexible, adaptable
- Serves multiple beneficiaries
- Useful during multiple hydrologic conditions
- Scale of impact
- Partnerships

Guiding Questions

- What are the overarching characteristics of conveyance projects that will advance water resilience, particularly considering climate change?
- What criteria should the state use to assess the effectiveness of conveyance in improving resilience at local, regional, and state level? Are some resilience criteria more critical than others?
- What types of climate-resilient conveyance projects should be resourced first?
- How can the state foster regional partnerships and collaboration to promote projects that advance watershed- or basin-wide resilience?

Possible Considerations

- Are big, interregional projects more critical to fund due to their scale? Or is funding a decentralized system going to better serve climate resilience?
- Can the state play a role in climate resilience by ensuring climate change is considered in planning conveyance?
- Can the state play a role in setting metrics by requiring a scientifically-based water budget?

Determining and Assessing Public Benefits

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State Responsibilities

- Human Right to Water
- Enhancing public trust resource
- Ensuring public health and safety
- Establishing resource goals
- Establishing and enforcing rules of behavior

Determining Public Benefits

- Benefits to the people of California that do not readily accrue to private users
  - GHG reductions, ecosystem/habitat
- Benefits of statewide scale and importance
  - Subsidence, sea level rise/saltwater intrusion, water quality, flood protection, economic stimulus
- Benefits to catalyze progress and systemic change
  - Innovation, planning, collaboration

Assessing Public Benefits

- Considerations
  - What public priorities do a project meet?
  - Do the public benefits outweigh the impacts (e.g., to the environment)?
  - Is there a way to meet public priorities in a more cost-effective, sustainable way?
  - Will the project move forward without state funding?
- Examples
  - Water Storage Investment Program
  - Army Corps of Engineers

Guiding Questions

- What are the public benefits of conveyance projects?
- Are some benefits more of a public priority than others? Should certain benefits be resourced before others?
- How should the state determine the value of public benefits?

Assessing Financing Mechanisms and Challenges

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Traditional Financing Options

- Water users
- Contractual mechanism
- State grants and loans
- Federal grants and loans

Emerging Financing Options

- Federal stimulus funds
- Enhanced Infrastructure Finance Districts
- Public Private Partnerships
- Public Goods Charge
- Green bonds

Financing Challenges

- Local sources
  - Insufficient user base
  - Decline in revenue due to recession
- State sources
  - Limitations of general obligation bonds
  - Impacted state budget
- Policy challenges
  - Propositions 218, 26, and 13

Guiding Questions

- How are conveyance projects funded currently? How are costs being shared between funding sources?
- Would project proponents prefer to use certain funding mechanisms going forward?
- What models exist for innovative funding of projects?
- What are the biggest challenges to financing conveyance projects? What role can the state play in overcoming these challenges?
- What funding mechanisms will best advance resilient water conveyance that could help meet needs in a changing climate?

Moving Forward

- Revisit guiding questions with new information from panels and workshops
- Reshape guiding questions based on Commission feedback
- Use information gathered through workshops, panels, and Commission discussions to shape final paper/recommendations

Action 19.4

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