

California Water Commission

Resilient Conveyance

November 18, 2020

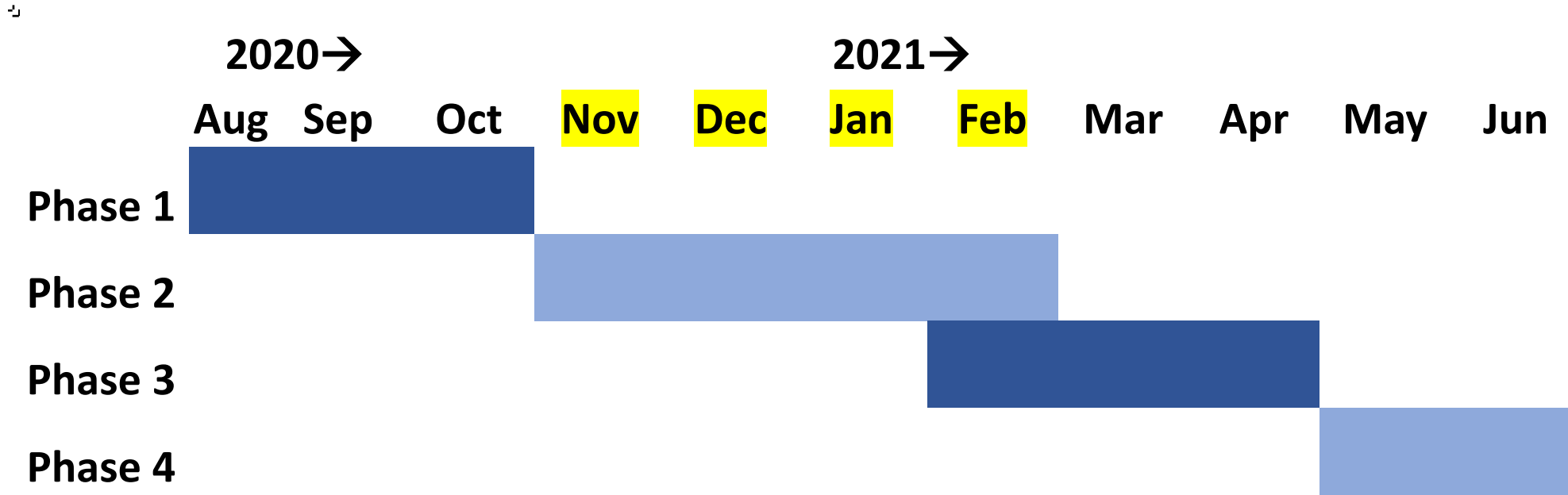
Commission Responsibility

Action 19.4

Assess a state role in financing conveyance projects that could help meet needs in a changing climate

Workplan

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



At This Meeting

- Guiding Questions: review information gathered to date
- Panel: Conveyance and the Human Right to Water in the Context of Climate Change
 - Panel 1a: Resilient conveyance projects that meet the needs of a changing climate
 - Panel 1b: Human Right to Water



Next Steps

Phase 2: Gather Public Input

- Regional workshops
 - Southeastern California – December 8th
 - Southern California – December 10th
 - Northern California – January 12th
 - Central California – January 26th
- Commission Meeting Expert panels
 - December 16th – Determining & Valuing Public Benefits
 - January 20th – Financing Mechanisms & Challenges





Defining Resilience and Considering Conveyance in the Context of Climate Change

Overarching Question

How can water conveyance projects augment water resilience and help meet the needs of a changing climate?

- Highlight *transformation*: promote ability of system to accommodate “new normal” instead of returning to previous state
- Push for action but build in the ability to learn from doing
- Develop diverse portfolios of options, statewide and regional
- Break down silos: connect upper and lower watershed, consider water supply and flood water
- Functioning natural systems contribute to resilience
- Advance a data-driven response to climate change that draws on planning, water budgets

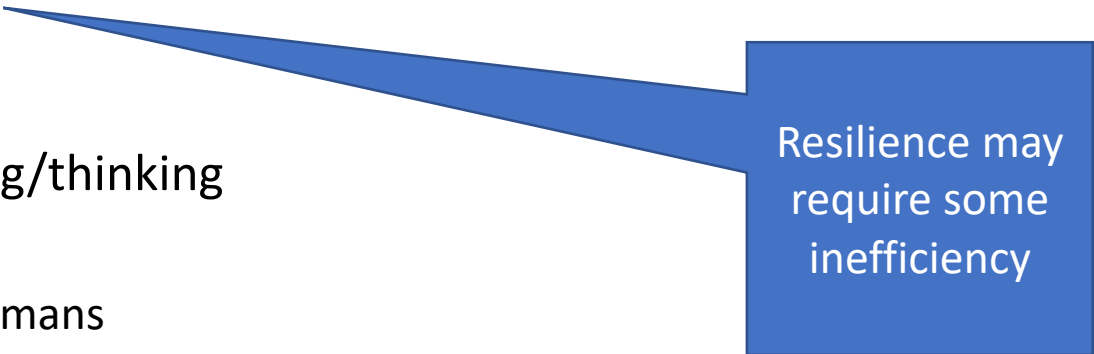
Consideration:

- Flood flows are being looked at as an answer to water supply reliability under SGMA, climate change. What role do water rights play in limiting flood capture/water supply strategies? What does it mean to the environment to take these flows off the system?

Guiding Question

What are the overarching characteristics of conveyance projects that will advance water resilience, particularly considering climate change?

- Projects are adaptable: responsive to and reliable during change/crisis
 - Flexible, redundant, interconnected
 - Robust emergency response capacity
 - Adaptive to all hydrologic conditions
- Projects are guided by long-term planning/thinking
- Projects are balanced
 - Account for needs of environment, all humans
 - Science-based



Resilience may require some inefficiency

Guiding Question

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?

- **Climate Governance & Planning.** How well is climate change embedded into the institutions supporting the project?
- **Resilient Design.** How well is climate change embedded into the project's design?
- **Multiple Benefits.** Does the project serve multiple beneficiaries?
- **Partnerships.** How is the project engaging partners and collaborating with stakeholders?
- **System-scale.** Is the project considering watershed- or basin-scale solutions?

Guiding Question

What types of climate-resilient conveyance projects should be resourced first?

- Multi-benefit/purpose projects
 - Enhance and preserve ecosystem
 - Human Right to Water
- Projects that support SGMA
- Projects that promote local/regional reliance instead of reliance on statewide systems
 - Interties, consolidations
 - Water trading and banking
- State Water Project/Central Valley Project infrastructure

Consideration:

- Are big, interregional projects more critical to fund due to their scale? Or is funding a decentralized system going to better serve climate resilience?

Guiding Question

How can the state foster regional partnerships and collaboration to promote projects that advance watershed- or basin-wide resilience?

- Develop incentives for collaboration
- Promote multi-benefit approaches

Determining and Assessing Public Benefits

Overarching Question

What are the public benefits to state taxpayers that may justify state financing of conveyance projects?

- “Fiscal orphans” (PPIC)
 - Poor rural communities
 - Flood protection
 - Ecosystems
 - Collaborative management
- Analysis that sheds light on smart, cost-effective strategies

Guiding Question

What are the public benefits of conveyance projects?

- 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, Human Right to Water
- Benefits to catalyze progress and systemic change
 - Innovation, planning, collaboration

Guiding Question

Are some benefits more of a public priority than others? Should certain benefits be resourced before others?

- “Fiscal orphans” lack reliable funding:
 - Poor rural communities
 - Flood protection
 - Ecosystems
 - Collaborative management

Consideration:

- Is there value in looking outside public benefits to consider how to pay state’s share? Loans may not require considering public benefits.

Guiding Question

How should the state determine the value of public benefits?

Considerations:

- How was this question answered for the Commission's Water Storage Investment Program?
- Does the state need to invest in the project? Is there a way to meet public priorities in a more cost-effective, sustainable way? Will the project move forward without state funding?

Assessing Financing Mechanisms and Challenges

Guiding Question

How are conveyance projects funded currently? How are costs being shared between funding sources?

- Water users pay for majority of project costs
- State grants and loans
- Federal grants and loans

Guiding Question

Would project proponents prefer to use certain funding mechanisms going forward?

- Water managers like grants, but they are costly to secure/manage
- Low interest loans are appealing, particularly with:
 - Flexible repayment
 - Low issuance cost

Guiding Question

What models exist for innovative funding of projects?

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

Guiding Question

What are the biggest challenges to financing conveyance projects? What role can the state play in overcoming these challenges?

Challenges

- Local sources: insufficient user base, decline in revenue due to recession, over-reliance on “beneficiary pays”
- State sources: limitations of general obligation bonds, grant process, impacted state budget
- Policy challenges: Propositions 218, 26, and 13, CEQA/permitting
- Paying for ongoing operations and maintenance

Possible State Responses

- Draw from energy and transportation sector
- Encourage alignment across agency programs, requirements
- Align regulatory approaches to make it easier to use the grid well
- Facilitate pooling of resources, low-cost borrowing

Guiding Question

What funding mechanisms will best advance resilient water conveyance that could help meet needs in a changing climate?

- Water users will need to be the main funders
- Other local, regional sources possible too (e.g., land assessments)
- Need to align incentives, avoid leaning on regressive taxes (e.g., sales tax)

Overarching Question

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?