### **Delta Drought Response Pilot Program** A Collaboration among Delta Water Users and State Agencies

**Objectives:** 

Reduce drought stress in the Delta watershed, protect Delta water quality, and improve mutual understanding of agricultural practices and water conservation opportunities in different

regions within the Legal Delta.

Background: The Delta Drought Response Pilot Program (Pilot Program) is in

> response to consecutive dry years, low combined storage in Project reservoirs, and drought-constrained water deliveries to Project contractors. Funds are available to incentivize agricultural water users in the Legal Delta to take actions expected to reduce crop consumptive water use and protect water quality. Water conserved through incentivized actions in the Pilot Program will be allocated to protecting Delta water quality and will not be available for diversion or exports. By rigorously monitoring the outcomes and impacts of a variety of actions in different settings throughout the Legal Delta, the Pilot Program will provide data to support targeted water conservation/quality protection responses

to sustained and/or future droughts.

Collaborators: The North, Central, and South Delta Water Agencies in

> collaboration with the California Environmental Protection Agency, California Natural Resources Agency, and the California Department of Food and Agriculture (collectively, the Agencies).

Pursuant to an Interagency Agreement between the Department Administrator:

> of Water Resources and the Sacramento-San Joaquin Delta Conservancy (Conservancy), the Conservancy will administer the

Pilot Program.

**Eligible Applicants:** Individual agricultural water users having points of diversion

within the Legal Delta who propose specific water conservation

actions, subject to specified criteria and conditions.

Reduce consumptive use of water within the Legal Delta versus

"business as usual" agricultural through:

1. Collection of credible data on criteria, affects, tradeoffs, and costs of short-term conservation/protection actions;

Goal:

- 2. Acquisition of insight to inform collaborative development of potential predictable dry-year responses in future droughts;
- 3. Conservation of upstream freshwater storage;
- 4. Protection of Delta water quality control objectives (e.g., salinity intrusion);
- 5. Reduction of stress on migrating salmon and other aquatic, avian, and terrestrial species;
- 6. Minimization of collateral economic and social impacts of persistent drought;
- 7. Support of broader watershed-wide habitat enhancement measures; and
- 8. Mobilization of farmers' expertise to guide water conservation/protection actions.

# Short-term Water Conservation/Protection Actions (Actions):

Applicants will propose to carry out Actions likely to advance the Goals as they deem appropriate for their locations and agricultural capabilities. Proposed Actions must be reasonably expected to reduce net crop consumptive use of water in the Applicants' agricultural operations during the 2022 water year (i.e., no savings in one area offset by practices in another). If selected for participation in the Pilot Program, the Applicant will be offered a grant agreement specifying Actions that they will carry out on specified fields under their control during specified periods during the 2022 water year. Among the most promising such Actions suggested through extensive outreach to experienced farmers in the Delta:

- Foregoing a planned cash crop (e.g., maintaining idled farmland with appropriate drainage and appropriate healthy soil protections);
- Shifting irrigation practices to conserve water, reduce or adjust timing of diversions, increase reuse, and/or protect water quality (e.g., converting to 60" furrows on flood irrigated crops, foregoing a portion of the irrigation cycle, replacing flood irrigation with subsurface irrigation, etc.); and
- 3. Shifting to less water-intensive crops (e.g., cultivating small grains like winter wheat or safflower that require little or no diversion of surface water for irrigations, instead of a more water-intensive summer crop like corn or tomatoes).

The Collaborators encourage Applicants to propose other innovative Actions designed to accomplish one or more of the Goals.

#### **Grant Amount:**

Grantees will receive a grant of \$900 per enrolled acre payable as follows. Twenty five percent (25%) is payable upon execution of the Grant Agreement. Up to fifty percent (50%) is payable upon satisfactorily completing deliverables and key project milestones to be specified in the grant agreement. The balance of the grant is payable upon completion of all tasks specified in the grant agreement. The fixed-formula grant has been determined based upon:

- Experience with other agricultural water conservation programs in California;
- Recognition of costs associated with carrying out water conservation/protection actions while maintaining healthy soils;
- Feedback from farmers with experience both in the Legal Delta and in the wider Delta watershed and export areas;
- The need to gather data to inform future water conservation/protection programs; and
- Urgency to implement a practical program during the unique 2022 water year.

#### **Selection of Grantees:**

The Collaborators recognize that the same or similar Actions may have widely different costs (such as foregone opportunity costs, drainage expense, weed management, etc.) and widely different water conservation/protection outcomes across different areas of the Delta (based on variations in soil type, weather conditions, depth to groundwater, and other factors). Moreover, Actions appropriate for one area may be inappropriate, ineffective, or impossible to undertake in another area. Because of the need to identify and quantify such variabilities, grants will be awarded to maximize the anticipated value of comparative data as well as the potential water conservation/protection effects of proposed Actions.

The Conservancy will convene a Selection Committee composed of knowledgeable individuals nominated by the Collaborators to

evaluate and select Applicants to be offered Grant Agreements based on (i) diversity of locations; (ii) variety of proposed Actions; (iii) best estimates of prospective consumptive use savings; (iv) expected timing of such savings; (v) anticipated collateral benefits/detriments; and (vi) data research needs. The Selection Committee will meet to review applications on a rolling basis as they are received. Following initial Selection Committee review, the Conservancy may contact Applicants to discuss refinements or other aspects of their proposals. The Conservancy will exercise its best efforts to respond to all Applications within 14 days of receipt.

# Baselines for Measuring Conservation:

The Applicant and the Conservancy will discuss and agree on the appropriate baseline for comparison to establish the water conservation/quality protection impacts of proposed Actions. The appropriate baseline will be specified in each Grant Agreement. Baseline establishment approaches could include: Evapotranspiration (ET) on a field selected for fallowing during 2022 could be compared with ET on the same field during 2021. The ET savings associated with changing irrigation practices could be measured against similar fields/crops during the Pilot Program. Savings associated with crop substitution actions could be measured against 2022 ET on comparable fields supporting the original crop.

#### **Measurement of Crop ET:**

For purposes of the Pilot Program, crop ET will be measured by the State Agencies through OpenET (<a href="https://openetdata.org/">https://openetdata.org/</a>) and evaluated by the Oversight Committee (see Monitoring and Evaluation below).

### Monitoring and Evaluation:

Monitoring and evaluation of the Pilot Program will be as transparent and objective as available data allow. The Conservancy will consult with the Collaborators to select a technical oversight committee (Oversight Committee). In cooperation with Grantees, the Oversight Committee will gather and share all data related to the Pilot Program. To augment measurement of crop ET through OpenET, the State Agencies will organize a Monitoring Team, comprised of academic researchers, to assist with data gathering, monitoring, and synthesis of data

from the Pilot Program. Representatives of the Conservancy, and the Collaborators will meet regularly to assess the Pilot Program. The Conservancy and the Office of the Delta Watermaster will prepare a written draft evaluation of the Pilot Project for public review and comment prior to finalization.

## Access for Monitoring and Verification:

The Grant Agreement will include permission from the Grantee for representatives of the Conservancy (including Collaborators, Selection Committee, Oversight Committee, and Monitoring Team) to access the site for monitoring and verification purposes. Such representatives will provide at least 24-hours advance notice to the Grantee and follow appropriate safety protocols while on site. Site visits will be at the sole risk of the representatives; Grantee will have no liability for the safety of the representatives related to site visits. In addition, a limited number of Grantees may be asked to host field measurement equipment. Conditions for the field equipment will be specified in the applicable Grant Agreements.

**Program Costs:** All costs associated with implementing Actions are to be borne by

Grantees. All costs for monitoring and administering the Pilot

Program will be borne by the State Agencies.

**Application Submission:** Applicants should complete proposals for grant funding on the

Delta Drought Pilot Program Application Form.

**Contact Information:** www.deltaconservancy.ca.gov/grant-program

If you have questions, please contact the Conservancy at <a href="mailto:Contact@DeltaConservancy.ca.gov">Contact@DeltaConservancy.ca.gov</a> or (916) 375-2084.