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## 8.0 Implementation Strategies

### 8.1 Statutory Requirements for Implementation Strategies in Stakeholder Committee Report

Section 11.02362 (o) Texas Water Code: Each basin and bay area stakeholders committee shall review the environmental flow analyses and environmental flow regime recommendations submitted by the committee's basin and bay expert science team and shall consider them in conjunction with other factors, including the present and future needs for water for other uses related to water supply planning in the pertinent river basin and bay system. The basin and bay area stakeholders committee shall develop recommendations regarding environmental flow standards and strategies to meet the environmental flow standards and submit those recommendations to the commission ...*(Emphasis Stakeholder Committee)*

(p) In recognition of the importance of adaptive management, after submitting its recommendations regarding environmental flow standards and strategies to meet the environmental flow standards to the commission, each basin and bay area stakeholders committee, with the assistance of the pertinent basin and bay expert science team, shall prepare and submit for approval by the advisory group a work plan. The work plan must...

(3) establish a schedule for continuing the validation or refinement of the basin and bay environmental flow analyses and environmental flow regime recommendations, the environmental flow standards adopted by the commission, and the strategies to achieve those standards. *(Emphasis Stakeholder Committee)*

### 8.2 Further Development Through Work Plan Process.

The Stakeholder Committee has identified various categories and approaches for strategies to meet the environmental flow standards recommended. The Committee recognizes that much more work is needed to develop specific strategies that are ready for implementation. The Committee acknowledges the importance of strategies in meeting the environmental flow standards being recommended and intends to continue work in refining these strategy recommendations, including by identifying potential approaches for implementing the recommendations, through the work plan process.

### 8.3 Regulatory Strategies:

- A. A set standard of net benefit to environmental flows in basin of origin should be applied to inter-basin transfers to include potential return of return flows. Flexibility should be authorized to allow project participants to achieve the net benefit through a variety of mechanisms, including, for example, the purchase and conversion of other water rights to environmental protection purposes.
- B. Explore methods for increasing reliability, using firm yield concepts, for voluntary implementation strategies to meet environmental needs.
- C. Consider ways to dedicate cancelled water rights to environmental flows.
- D. Consider ways to use tax incentives to encourage donation of water rights

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- E. Consider ways to encourage local governments to require developers to coordinate with local entities and perform pre-development studies to determine that sufficient water is available for proposed development projects.
  - F. Consider creating incentives that apply to future new appropriation authorizations, to the extent that they do not involve an interbasin transfer to dedicate a reasonable portion of resulting return flows to environmental flow protection. Incentives should be available if an appreciable amount of return flows could be generated.

#### 8.4 Voluntary Strategies

##### SB 3 Legislative Findings Supporting the Use of Voluntary Strategies

**11.0235(b) TWC.** Maintaining the biological soundness of the state's rivers, lakes, bays, and estuaries is of great importance to the public's economic health and general well-being. The legislature encourages voluntary water and land stewardship to benefit the water in the state, as defined by Section 26.001.

**11.0235(d-3)(2)TWC.** In those basins in which the unappropriated water that will be set aside for instreamflow and freshwater inflow protection is not sufficient to fully satisfy the environmental flow standards established by the commission, a variety of market approaches, both public and private, for filling the gap must be explored and pursued. (*Emphasis ours*)

Since there is very little unappropriated water in the Colorado River that could be reliably developed, there may rarely be new permits issued in that basin to which the environmental flow regime standards adopted by the Colorado and Lavaca Rivers and Matagorda and Lavaca Bay and Basin Stakeholder Committee will apply. Consequently, strategies to implement the recommended flow regimes in the Colorado Basin will necessarily have to focus primarily on voluntary activities funded privately or through grants.

#### 8.5 Strategies Applicable Throughout the Colorado and Lavaca River Basins

- A. Donation, Purchase or Lease of Existing Water Permits - Current Texas law does not permit the issuance of new permits for instream flows dedicated to environmental needs or bay and estuary inflows, but does authorize amendments to existing permits or certificates of adjudication to change the use to, or add a use for, instream flows dedicated to environmental needs or bay and estuary inflows.
  - Willing water rights holders should be encouraged to donate, sell or lease all or part of their permitted or adjudicated water rights to the Texas Water Trust or to private 501 (C)(3)water trusts which would:
    1. Receive and hold tax-deductible donations of water rights and obtain monetary donations for the purchase or lease of water rights .
    2. Purchase water rights to be to be amended to add instream uses.
    3. Pay irrigators for forbearance from irrigating during drought years to compensate for crop loss.

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4. Lease rights on a long-term basis for instream flows
  5. File the water right amendment with the TCEQ for the permit holders, do the accounting and maintain records.

This strategy may be most suited to specific locations where recreational use, habitat preservation or esthetics are of special concern to the local or regional community.

- Obtain grants, donations or state or federal funding for purchase or lease of water rights for environmental flows and for riparian restoration projects.

B. Promote Water Stewardship Practices to Qualify for Appraisal as Open-Space Land

- Look for opportunities to promote and encourage those landowner water stewardship practices, including the holding of a water right that authorizes the use of a specified minimum amount of water for instream flows for environmental needs or bay and estuary, which shall make the landowner eligible for appraisal open-space land for purposes of ad valorem property tax exemption.
- Develop an educational program to inform landowners of this new opportunity for open-space exemption.

C. Conservation

Incentives for water users to use good management practices:

- Surface water saved through installation of more efficient equipment or management practices should not be subject to cancellation for non-use
- BBASC should work with NRCS to give priority to EQIP contract awards for water conservation practices including brush control and laser leveling.
- Obtain grants, donations or state or federal funding for riparian restoration projects.
- Development of various incentive programs, for example, funding for an entity to promote conservation, with a portion of conserved water dedicated to environmental flow protection.
- Public relations program to encourage municipalities to adopt water –use rate structures that will encourage conservation.

D. Explore ways to improve water availability information for prospective land purchasers.

E. Alternative Water Supplies

- Explore potential for substituting treated effluent (e.g., direct reuse) for surface water supplies in some areas of the basins, where there is a net benefit to environmental flows.
- Explore potential, incentives, and grants or state funding for household graywater use.
- Explore potential for conjunctive use to help protect environmental flows during dry periods.

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#### F. Groundwater Management for Springflow Protection

- Participate in Groundwater Management Area meetings and support the adoption of Desired Future Conditions and groundwater management approaches which will protect key springflows and groundwater-derived base flows.
- Encourage the TWDB to perform or fund studies - especially co-operative studies among multiple groundwater districts -which determine levels of pumping and aquifer drawdown that impair flows from key springs.

#### G. Diversion Point Management

Opportunities may exist for conservation groups to work with a number of water right holders along a river segment to relocate water right diversion points or use older rights in conjunction with newer rights to improve delivery efficiencies. This has been done in the Entiat River in Washington State.

(See <http://www.warivers.org/entiat.html>)

#### H. Voluntary Dedication of Wastewater Return Flows

### 8.6 Site Specific Implementation Strategies

Generally, all implementation strategies are considered to be applicable for all locations unless the general discussion indicates otherwise. Where certain strategies are considered to be particularly appropriate for a given area, those specific strategies are listed below.

#### Upper Colorado

- State funding or tax incentives for brush control of cedar and mesquite
- State funding or tax incentives for salt clean-up on land
- State funding for studies determining reasons for downward trends in streamflow in the Upper Colorado

#### Lower Colorado

- State funding or tax incentives for nuisance vegetation control including noxious, invasive plants and establishment of native vegetation

#### Lavaca-Navidad River

- State funding for sediment control

#### Coastal Streams

- Add stream gages

#### Matagorda Bay

- Install gages on Turtle and Keller Creeks.

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### East Matagorda Bay

- Conduct study of the needs of East Matagorda Bay, including the feasibility of directing additional flows to the bay.
- Redirect flood flows from in Brazoria County to East Matagorda Bay
- Build small channels without boat access to improve circulation in East Matagorda Bay
- Evaluate reasonableness of pumping groundwater into East Matagorda Bay
- Build siphons or pipelines under the intracoastal waterway to ensure that local inflows actually reach the bay.
- Assure that strategies chosen are not impaired by the intracoastal waterway
- Explore the feasibility and efficacy of using various cuts to increase freshwater inflows to the bay- e.g., St. Mary's Bayou and Caney Creek

### Lavaca Bay

- Add salinity monitoring sites