



STRATEGIES
for
IMPLEMENTATION
of
ENVIRONMENTAL FLOW
RECOMMENDATIONS

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SB 3

- 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

Sec. 11.02362 (p) TWC

(p) In recognition of the importance of adaptive management, after submitting its recommendations regarding environmental flow standards and strategies 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 standard adopted by the commission, and the strategies to achieve those standards. (*Emphasis ours*)

FURTHER DEVELOPMENT THROUGH WORK PLAN

- 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.

STRATEGIES

A. REGULATORY

B. VOLUNTARY

C. EDUCATIONAL

REGULATORY

- A set standard of net benefit to environmental flows in basin of origin should be applied to inter-basin transfers. Flexibility should be authorized to allow achievement of the net benefit through a variety of mechanisms, including, for example, including potential return of return flows.

REGULATORY

Explore methods for increasing reliability, using firm yield concepts, for voluntary implementation strategies.

REGULATORY

- Consider ways to dedicate cancelled water rights to environmental flows.
- Consider ways to account for unused flows, which are assumed to be diverted and thus not available for other uses, including environmental flows.

REGULATORY

- Consider ways to quantify and account for riparian domestic and livestock water use

REGULATORY

- D. Consider ways to use tax incentives to encourage donation of water rights

REGULATORY

- Consider ways to work with local governments to require developers to co-ordinate with local entities and perform pre-development studies to determine that sufficient water is available for proposed development projects

REGULATORY

- 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 return flows to environmental flow protection. Incentives should be available if an appreciable amount of return flows could be generated.

Regulatory/Voluntary

- Dam Reoperation
- Rescheduling dam releases so that amount and timing of releases better mimics natural flow patterns of the river system.
- This can be done to individual or multiple dams in a watershed to enhance the effect.

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.

LEGISLATIVE SUPPORT FOR VOLUNTARY STRATEGIES

- **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.**

SPACING

VOLUNTARY STRATEGIES

- **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.

Voluntary Strategies- Donation, Purchase or Lease

- 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:

501 (c)(3) Water Trusts

- 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 re-permitted for instream flows.
- 3. Lease rights on a long-term basis for instream flows
- 4. Contract to pay irrigators for forbearance from irrigating during drought years to compensate for crop loss.
- 5. File the water right amendment with the TCEQ for the permit holders, do the accounting and maintain records.

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

- Look for opportunities to promote and encourage 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 as 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, riparian buffer zones and laser leveling.

CONSERVATION INCENTIVES

- Obtain grants, donations or state or federal funding for riparian restoration projects.
- Development of various incentive programs, for example, funding for an entity for water conservation practices, with a portion of the conserved water dedicated to environmental flow protection.
- Public relations program to encourage municipalities to adopt water –use rate structures that will encourage conservation.

D. EDUCATION AND AVAILABILITY OF INFORMATION

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.

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>)

Site Specific Implementation Strategies

- 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

Site-Specific Strategies.

- 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**