

Endangered Species Program/ Edwards Aquifer Initiative

U.S. Fish and Wildlife Service
&
Texas Commission on Environmental
Quality



USFWS/TCEQ Coordination

- USFWS and TCEQ have recognized the overlap in their natural resources responsibilities and have determined that taking a coordinated approach to water quality protection will have mutual benefits.



How is USFWS involved?



USFWS has been coordinating with TCEQ's development of optional water quality measures for the technical guidance document of the Edwards Aquifer Rules. These Rules protect groundwater from degradation.

How is USFWS involved? (con't)

The USFWS anticipates that if project planners follow the current technical guidance document for the Edwards Aquifer Rules and the new, optional water quality measures, water quality impacts would not result in "take" of some of the listed and candidate species found in the Edwards Aquifer region.

Take avoidance through Edwards Aquifer Rules and optional water quality measures

The optional water quality measures are an appendix to TCEQ's technical guidance document for the Edwards Aquifer Rules.

Take avoidance through Edwards Aquifer Rules and optional water quality measures (con't)

These measures will include:

- 1) Stronger BMP performance requirements
- 2) Measures to address stream channel erosion
- 3) Sensitive feature protection practices
- 4) Natural buffers adjacent to streams
- 5) Guidelines for sealing sensitive features
- 6) Methods to improve BMP maintenance documentation

What is "take"?

"Take" as defined by the Endangered Species Act of 1973, as amended means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct".

What is "take"? (con't)

"Take" also includes habitat modification or degradation that results in death or injury to Federally-listed species.

Take is prohibited under the ESA, unless a permit has been issued for a project by the USFWS.

How does "take" relate to the measures?

Implementation of the current technical guidance document for the Edwards Aquifer Rules and the new optional water quality measures will allow project planners to determine that their project will not result in take of one or more listed species due to water quality impacts.

Project Planning

- To determine if take of listed species is possible and use of the optional water quality measures should be considered, a project planner first needs to determine if listed species are present in the segment of the Edwards Aquifer of their planning area. A species list may be requested from the USFWS.

Project Planning (con't)

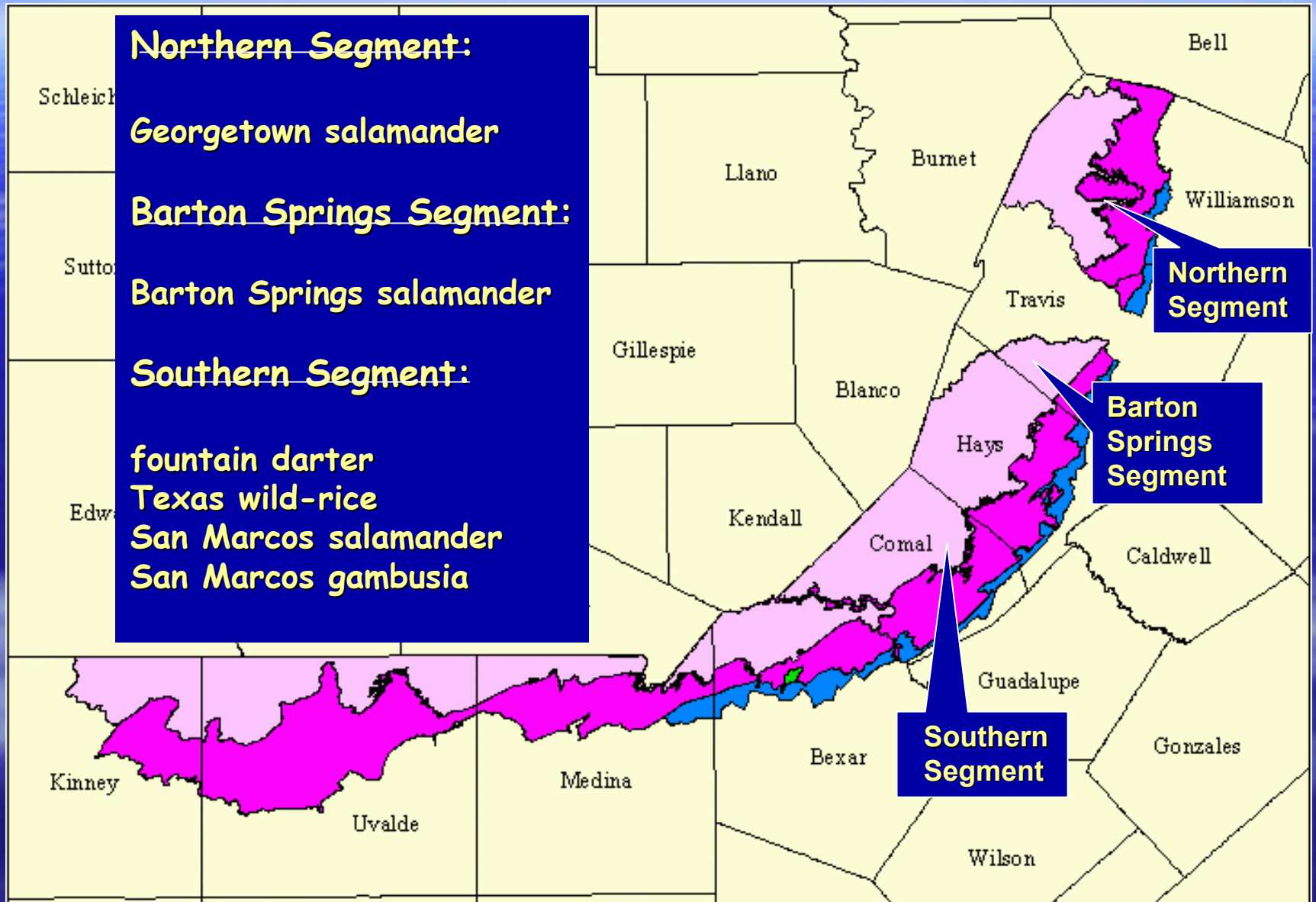
- If no listed species are present, then no further action is necessary for ESA compliance. If a listed species is present and it is one of the included species, then the technical guidance document with optional water quality measures may be followed for ESA compliance.

Which species will be included?

- Barton Springs salamander
- San Marcos salamander
- San Marcos gambusia
- fountain darter
- Texas wild-rice*
- Georgetown salamander

*Plants are not covered by the take provisions of section 9 of the ESA so wild-rice would not be affected by water quality impacts through implementing the Rules and optional water quality measures

In what segment of the Edwards Aquifer are the included species found?



What situations will still warrant direct consultation with USFWS?

Examples:

- 1) Projects outside the Edwards Aquifer rules jurisdiction
- 2) Projects resulting in impacts to listed species that are not water quality related
- 3) Projects in close proximity to springs
- 4) Projects that may impact subterranean, listed species

Monitoring information sharing

- Recently, USFWS and TCEQ met with many of the groups that are currently monitoring Edwards Aquifer water quality, and in some cases, biological resources.

Monitoring information sharing (con't)

- All of these groups have committed to sharing the results of their monitoring.
- Information will be routed to a clearinghouse where trend analysis will be done. This information will be used for adaptive management.

Adaptive management

If analysis of Edwards Aquifer monitoring information indicates water quality degradation that might impact an included listed species, then a technical team would meet to plan appropriate actions.

Revisions to the optional water quality measures will be made, if necessary.

USFWS/TCEQ information coordination

USFWS will receive information from TCEQ such as the number and location of projects it authorizes within the Edwards Aquifer region.



How is TCEQ involved?



TCEQ implements the Edwards Aquifer Rules:

(Title 30 TAC, Chapter 213)

- were designed to ensure "the existing quality of groundwater not be degraded, consistent with the protection of the environment, the operation of existing industries, and the maintenance and enhancement of the long term economic health of the state"

How is TCEQ involved? (con't)

- The Edwards Aquifer Rules:
 - do not restrict the powers of any other governmental entity to protect water quality

Edwards Aquifer Rules

To comply with the Edwards Aquifer Rules:

- project planners must implement measures known as best management practices (BMPs) to reduce impacts to water quality
- TCEQ has provided "*Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices*"

Optional water quality measures approval process

- Developer chooses to use the optional measures in their plan design.
- Developer indicates on their application to TCEQ that they want their plan reviewed under the optional measures document.

Optional water quality measures approval process (con't)

- TCEQ reviews the application under the optional measures document, using the same processes currently in place for the program.

Optional water quality measures approval process (con't)

- Upon approval of the plan, developers that opt to comply with the new measures will receive an authorization letter from the TCEQ that indicates that the plan is approved under the optional measures.

Optional Water Quality Measures:

(1) Stronger BMP performance requirements

- Justification - Current rules allow substantial increases in pollutant loads, exempt certain developments, do not take advantage of retrofit opportunities

(1) Stronger BMP performance requirements (con't)

- Action - Require 80% removal of solids in runoff (rather than 80% of the increase), eliminate exemptions (i.e., there will no longer be an exemption from other permanent BMPs if the site uses 20% or less impervious cover), and provide buffers between development and waterways.

(2) Measures to address stream channel erosion

- Justification - As much as 90% of the sediment carried in urban streams are derived from channel erosion caused by the increase in impervious cover.
- Action - Restrict post development runoff rates to maintain stream morphology.

(3) Sensitive feature management

- Justification - Substantial recharge occurs in upland sensitive features.
- Action - Require buffer areas around sensitive features. Gate larger openings to prevent disposal of trash, protecting water quality with benefits to endangered species.

(4) Stream buffers

- Justification - Development adjacent to streams promotes erosion and allows pollutants to enter waterways.
- Action - Require buffer areas adjacent to streams with size dependent on drainage area.

(5) Sealing sensitive features

- Justification - Sealing of sensitive features reduces the quantity of clean runoff entering the aquifer.
- Action - Require that all sensitive features identified in geologic assessment remain open except in extenuating circumstances.

(6) BMP maintenance documentation

- Justification - One of the principal concerns regarding BMPs is impact of maintenance on long term performance.
- Action - Require facility owners to retain records of maintenance activities for at least 3 years to document that activities were performed in accordance with WPAP and add signs to BMPs.

Future USFWS/TCEQ coordination



- Additional species may be considered for inclusion in the "no take" concurrence at a later date. This will occur either:

Future USFWS/TCEQ coordination (con't)

- as further analysis of biological information indicates that the Edwards Aquifer Rules and optional water quality measures are protective of other listed species, or
- as new changes are made to the optional water quality measures that are protective of additional species.

Local water quality control

- This effort is not meant to replace local water quality control that is more stringent and provides protection for listed species.
- Municipalities and local authorities are encouraged to continue ongoing efforts that seek to improve water quality.