

HCP 101

What is a Habitat Conservation Plan,
Why Do We Need One, and
What Does It Mean For Us?

Tonight's Work Session

- **Part 1: HCP Overview**
 - Authorities and Applicable Regulations
 - Key Statutorily Defined Things
 - Incidental Take Permitting (ITP)
 - Component Parts of Any HCP
 - History of Our HCP
 - Current Elements of Our HCP
 - Timeline for Our HCP/ITP
- **Part 2: Highlights of Chapters 1 through 4**

Authorities

- The Federal Endangered Species Act
 - Defines certain species of plants and animals as either threatened or endangered (T&E)
 - Makes it illegal to do anything adverse to endangered species individuals: annoy, harass, harm, pursue, capture, trap, shoot, wound, collect, kill, etc.
 - Prescribes a process by which such outcomes that are limited *and* are incidental to other lawful activities may be allowed.

Authorities (cont'd)

- US Fish & Wildlife Service, Dept. of the Interior, is the regulatory authority for the ESA
 - Lists T&E species
 - Promulgates, administers, and enforces regulations to implement ESA
 - Issues science-based “Biological Opinions” on whether a proposed action avoids, minimizes, and mitigates adverse effects of the action on the endangered species and avoids jeopardizing the population and its recovery.

The Incidental Take Permit (aka ITP)

The FWS will issue an ITP to an applicant who demonstrates through an acceptable HCP that:

- the take of the specific endangered species covered by the ITP is incidental to specifically identified activities of the applicant that are covered under the ITP
- the conservation measures for the Covered Activities avoid, minimize, and mitigate the proposed take of Covered Species to the greatest extent practicable; and
- “Jeopardy” (extirpation of the Covered Species population, or inability of its population to recover from the Covered Activities) must be avoided.

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- the conservation measures for the Covered Activities avoid, minimize, and mitigate the take of Covered Species to the greatest extent practicable; and
- Jeopardy of extirpation of the Covered Species and inability of the population to recover from the Covered Activities are avoided.

WHAT?

Parsing out what the ITP does:

- The ITP provides the authorization that allows take of a specified number of individuals of one or more specifically identified “Covered Species”
- The ITP provides the authorization that allows such numerical take by certain specified “Covered Activities” of the Permittee for a specific time period (“Term”)
- “Take” is a designated action, ranging from annoying to killing individual organisms of Covered Species, that is *attributable to the Covered Activities*, and may be lethal and/or non-lethal
- Take of any other endangered species and/or by any other activity or outside the term of the ITP remains prohibited and illegal, subject to legal enforcement by FWS.

Parsing out what the HCP does:

- The HCP describes the Covered Activities in sufficient detail to judge whether and how much take may be caused by them.
- The HCP describes the characteristics and life requirements of the Covered Species in sufficient detail to judge if, how, and how much take may occur
- The HCP describes a set of conservation measures that are proposed to avoid, minimize, and mitigate take to the maximum extent practicable and avoid jeopardy.
- The HCP describes roles and responsibilities of entities involved in funding, administering, monitoring, and amending the HCP and ITP.

Prescribed Contents of Any HCP

- Brief Introduction/Background
- Purpose and Need for HCP
- Description of Areas To Be Analyzed/Permitted
- Proposed Covered Activities
- Proposed Term of Permit
- Covered Species
- Analysis of Effects and Likely Impacts of Takings
- Conservation Program
 - Biological Goals and Objectives
 - Avoidance and Minimization Measures

Prescribed HCP Contents (cont'd)

- Conservation Program (continued)
 - Mitigation Measures
 - Program Monitoring
 - Adaptive Management Plan
 - Implementation Roles
- Responding To Specified Changed Circumstances
- Responding To Unforeseen Circumstances
- Funding of Conservation Program
- Alternatives To the Taking Considered by Applicant
- Other Information Required by DOI Secretary
- References Cited

Focusing on the District HCP

- Brief History:
 - 1973: ESA became law, and ITP program authorized
 - 1990s: Growing concern that increasing amounts of water being withdrawn from the Aquifer could harm vulnerable species at Barton Springs during drought
 - 1997: BSS listed as endangered species
 - Late 1990s: Recognition that water chemistry changes during low springflows also have ecological significance
 - Early 2000s: District began re-assessing its drought management program and need for additional studies
 - 2001: ABS designated as candidate species for listing

Focusing on the District HCP (cont'd)

- Brief History (continued):
 - 2003: After FWS consultations and several other funding attempts, District secured \$1 million matching grant to develop science-based HCP and NEPA documents
 - 2004: HCP development initiated; Sustainable Yield Study completed and provided scientific underpinning for enhanced drought management plan
 - 2005: Laboratory study of DO and salinity effects on BSS initiated by Woods and Poteet at UT as part of HCP
 - 2007: Initial 'Preliminary Draft HCP and Preliminary Draft EIS' published by District; FWS reviews began
 - 2008: Additional \$170K matching federal grant obtained to complete HCP and NEPA documentation

Focusing on the District HCP (cont'd)

- Brief History (continued):
 - 2010: Second laboratory study and HCP-grant reports completed without a FWS-approved HCP
 - 2010: Establishment of Desired Future Conditions for Aquifer by GMA 10 as statutory requirement
 - 2010-2013: Continued multiple reviews and revisions of groundwater regulatory program and HCP documentation
 - 2013: ABS listed as endangered species
 - Now: Draft HCP in Board- and final FWS-Austin reviews before ITP application; Draft NEPA documentation in preparation to support ITP application

Focusing on the District HCP (cont'd)

- Covered Activities:
 - Water withdrawals from the Barton Springs Aquifer by nonexempt and exempt wells
 - Groundwater and drought management by the District
- Covered Species:
 - Barton Springs salamander, endemic to Barton Springs
 - Austin blind salamander, endemic to Barton Springs
- Term of the ITP: 20 years
- Recurring Funding of HCP: a designated \$942,000 (2014 dollars) portion of the District's existing annual funds

Comments on Take in the District HCP:

- Take is produced by adverse natural changes in water chemistry, especially Dissolved Oxygen (DO), in springflow as aquifer discharges at outlets decrease, a *portion* of which is attributable to water well withdrawals.
- The entire populations of both salamanders manifest non-lethal take, for a significant amount of the time.
- Lethal take is the difference in mortality caused by the pre-2004 groundwater withdrawals without the proposed conservation measures and no-pumping of the Aquifer.
- Proposed Conservation Measures \approx 2013 Management Plan Performance Standards: substantially reduce but cannot avoid lethal take.

An Important Take-away :

The approved HCP supports acquiring the ITP, which provides legal authorization and cover for continued operations of both the District and its permittees, whose District-authorized Edwards water withdrawals demonstrably cause “take” of endangered species; without an ITP, such water withdrawals are likely not legally allowable under federal law and could subject both the District and all its permittees to enforcement actions under the ESA.

Milestone Timeline for HCP/ITP

- Mar 1, 2014 – District submits Board-approved Draft HCP to FWS-AUS and MAC
- May 1, 2014 – District submits ITP application and Proposed HCP to FWS-AUS
- Aug 1, 2014 - District completes formal responses to public comments on Proposed HCP
- Dec 1, 2014 – FWS issues Draft Biological Opinion
- Jan 1, 2015 – District issues Final HCP, FWS issues Final Biological Opinion
- Jan 15, 2015 – FWS approves Final HCP; issues ITP

End of Part 1 Tonight

Any questions so far from the Board?



Part 2 Tonight

Review of Draft HCP Chapters
1 Through 4

Reviewing HCP Chapters 1 -4

Suggest we go chapter by chapter:

- First, I will provide a few highlights and comments for each chapter;
- Directors will request clarification of content or correct obvious errors of omission or commission, if any;
- Board will then discuss that chapter, as needed to understand, amplify, and/or modify content; and
- Board will indicate specific changes, if any, to be made by staff in that chapter for approval of the Proposed HCP.

Chapter 1: Introduction and Background

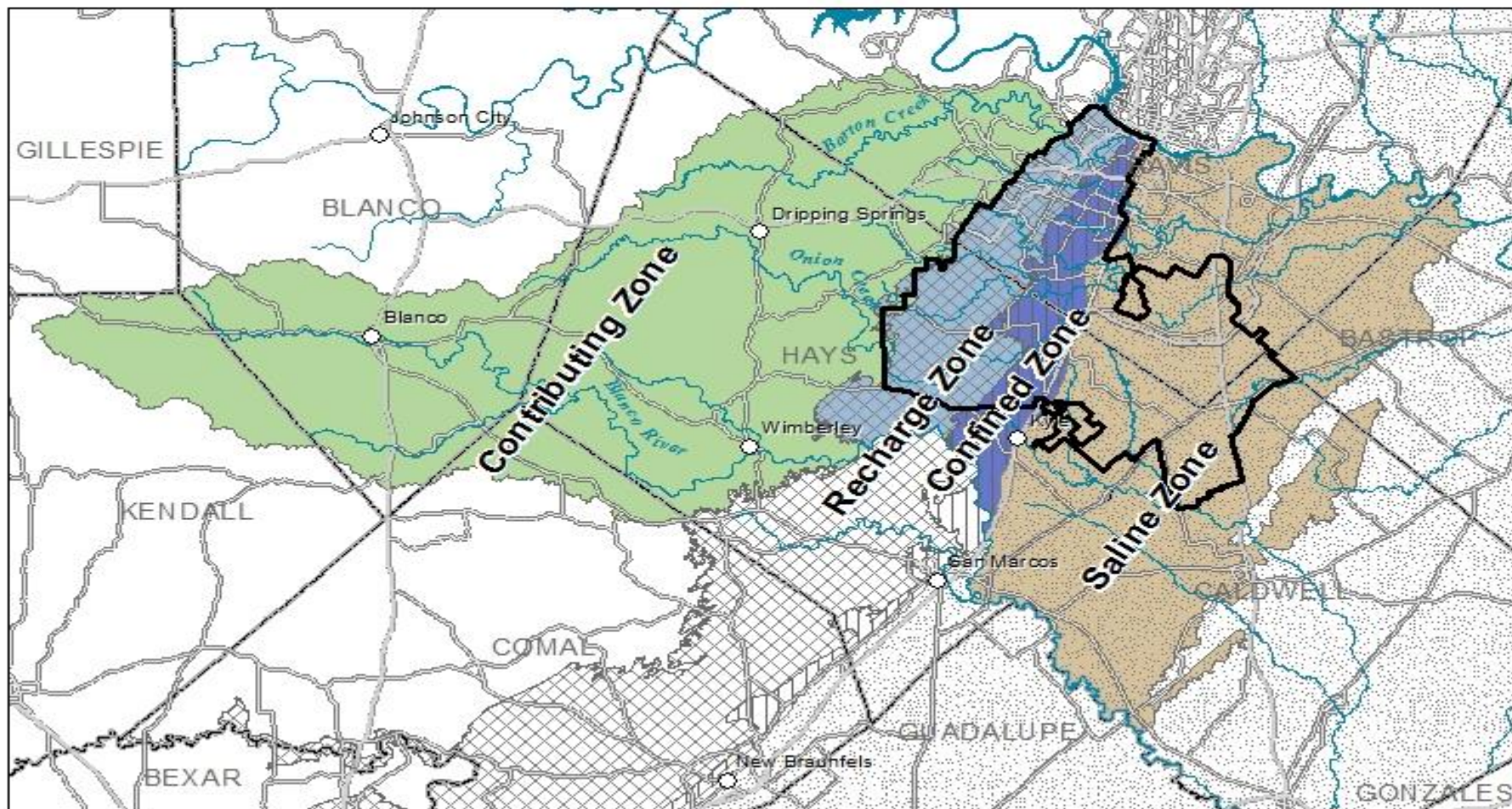
- Provides context of the HCP, including definitions, general descriptions, and scope; and
- Sets the stage for following chapters .

Chapter 2: Purpose and Need

- Purpose is to obtain the permit required under ESA
- Describes what District programs and actions give rise to take
- Describes what statutory authorities are associated with those actions
- Describes what statutory authorities are associated with the specification of take and the requirements for an ITP and HCP

Chapter 3: Description of Areas To Be Analyzed

- Defines two areas: the HCP Planning Area and the ITP Area
- Planning Area is the extended area between the Blanco and Colorado Rivers that includes watersheds of six creeks and the Blanco River above the recharge zone, and the saline zone eastward to the Carrizo-Wilcox outcrop.



0 2.5 5 10 Miles



Basemap: Contributing Zone compiled from Onion Creek, Barton Creek, and Blanco River watersheds;
 Recharge Zone extracted from TCEQ Edwards Aquifer Administrative Boundary dataset;
 Confined Zone modified from TWDB Major Aquifers, Edwards Aquifer subcrop dataset;
 Saline Zone extended from Edwards Aquifer subcrop eastern boundary.
 Robin Gary, BSEACD, October 2013.

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- Planning Area is described as to its physical, biological, and man-made environments, with more details on its hydrogeologic setting, on groundwater flow conditions, and on the portion within BSEACD's jurisdiction.

Chapter 3: Description of Areas To Be Analyzed (cont'd)

- ITP Area is defined as the subsurface part of BSEACD jurisdictional area and the immediate vicinity of the Barton Springs outlets.
- Physical setting of ITP Area is described as to variations in springflows and discussion of sources of recharge; modeling performed to characterize water balances; and also antecedent water usage conditions.
- Ecological setting of ITP Area is described as to endangered salamanders' habitats; variations in water chemistry with springflow; and its federally protected species in the three counties of the ITP Area.

Chapter 4: Proposed Actions

- Activities proposed to be covered under the ITP include: (1) Aquifer withdrawals/uses by well owner/operators, and (2) groundwater management by the District;
- Describes exempt and nonexempt well types and their use in the District; the District's regulatory program, the District's drought management program, its authorities, and the evolution of groundwater management and the HCP;
- Describes the multi-faceted participation of the public and stakeholders in these programs; and
- Requests 20-year permit term (duration), and its rationale.

End of Tonight's Work Session

- Other questions/comments on Chapters 1 through 4?
- What's coming up in Chapters 5-11 in next meeting's Work Session:
 - Take estimates, effects, and impacts
 - Review of HCP-specific conservation measures
 - Other HCP-specific commitments
 - Funding

Part 3 Next Meeting

Review of Draft HCP Chapters
5 Through 11