Guadalupe-Blanco River Authority

Guadalupe River
Habitat Conservation Plan

Technical Advisory Group Kick-off Meeting

October 3, 2022

CHAD NORRIS
DEPUTY EXECUTIVE MANAGER OF ENVIRONMENTAL SCIENCE

DAN OPDYKE, PH.D., P.E.
TECHNICAL ADVISORY GROUP CHAIR
Introductions

- Nathan Pence  
  Executive Manager of Environmental Science  
  npence@gbra.org

- Chad Norris  
  Deputy Executive Manager of Environmental Science  
  cnorris@gbra.org

- Jana Gray  
  HCP Coordinator  
  jgray@gbra.org
Technical Advisory Group

Dan Opdyke
Chair of Committee
Anchor QEA
Water quality and hydromodeling

Webster Mangham
Trinity River Authority
Mussel Policy and River Authority operations

Cindy Loeffler
Retired TPWD
Texas Water Policy and HCP’s

Ryan Smith
Texas Nature Conservancy
Texas water and ecosystems
Meeting Agenda

• Brief Overview of GRHCP
• Role of TAG
• Outline of TAG Review Process
  • Technical Memos vs HCP Chapters
• Upcoming Tech Memos
• Timeline and future meetings
• Comments from TAG members
• Public Comments
Role and Responsibilities of the TAG

• Attend a GRHCP TAG “kick-off” meeting

• Review and provide comments and input on GRHCP technical memoranda and working draft chapters as they become available

• Attend a GRHCP TAG closing meeting, where the TAG Chair will present a summary of their review
Review Process

• Tech Memos and Draft Chapters will be individually reviewed by TAG members
• Comments and GBRA responses will be submitted in a matrix for each document
• Matrix documents will be made into an appendix in the public draft and final HCP
Technical Memorandums

- **Tech Memos** give descriptive reviews of preliminary decisions made for the GRHCP and are intended to serve as an outline for HCP chapters.

- These memos are draft, and are used to make preliminary decisions.

- When the tech memos have finished the review process they will be published on the GRHCP website.
Process of Tech Memo Review Before Formation of the TAG

1. GBRA and contracting teams discuss goals of Tech Memo
2. Contracting team writes first draft
3. GBRA reviews and returns for final draft creation
4. Final draft given to USFWS to review
5. Tech Memo published to GRHCP website
TAG Tech Memo Review Process

1. Contractor drafts Technical Memo
2. GBRA reviews and submits comments
3. Technical Memo is updated to address comments
4. TAG and USFWS simultaneously review and submit comments
5. Comments are reflected in the draft HCP chapter
Published Tech Memos

PROJECT GOALS

• GBRA activities have potential to cause take of federally protected species

• The GRHCP will help minimize and mitigate any take of endangered species

• The GRHCP will also allow for others in the basin to seek coverage under GBRA’s permit

PERMIT TERM

• GBRA proposing 50-year permit term
  • Sufficient time to construct infrastructure projects, secure funding, and implement conservation measures
  • Certainty for GBRA construction and operations over a longer time period
  • Timeframe may provide more certainty to the USFWS that conservation strategy, monitoring, and adaptive management program contribute adequately to species recovery
Eastern Black Rail (*Laterallus jamaicensis* ssp. *jamaicensis*)

Golden-cheeked Warbler (*Setophaga chrysoparia*)

Monarch butterfly (*Danaus plexippus*)

Piping Plover (*Charadrius melodus*)

Red knot (*Calidris canutus rufa*)

Whooping Crane (*Grus americana*)

Undescribed *Eurycea* species 2 (*Devitt, T.*)

Cascade Caverns Salamander (*Eurycea latitans*) (*Devitt, T.*)

Fern Bank Salamander (*Eurycea pterophila*) (*Devitt, T.*)

Guadalupe Orb (*Cyclonaias necki*)

False Spike (*Fusconaia mitchelli*)

Guadalupe fatmucket (*Lampsilis bergmanni*)
HCP Chapter Review Process

Contractor sends draft chapter to GBRA

GBRA and TAG simultaneously review and submit comments

GBRA and TAG comments are incorporated into draft chapter

First administrative draft is created

USFWS reviews chapter
### Technical Memoranda or Chapter to be Review by the TAG

<table>
<thead>
<tr>
<th>Technical Memoranda</th>
<th>Anticipated Date to TAG for Review</th>
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<tbody>
<tr>
<td>Plan/permit area and permit term (2)</td>
<td>To be provided to TAG for information only</td>
</tr>
<tr>
<td>Covered activities</td>
<td>Need TAG review</td>
</tr>
<tr>
<td>Covered species</td>
<td>To be provided to TAG for information only</td>
</tr>
<tr>
<td>Existing info on species and data gaps, preliminary species accounts, potential species modeling needs</td>
<td>To be provided to TAG for information only</td>
</tr>
<tr>
<td>Existing info/studies on potential hydrologic, hydrogeologic, and water quality modeling needs</td>
<td>10/15/22</td>
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<tr>
<td>Climate change summary</td>
<td>11/18/22</td>
</tr>
<tr>
<td>Surface water hydrological modeling/results (WAM)</td>
<td>11/18/22</td>
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<tr>
<td>Water quality modeling/results</td>
<td>1/4/23</td>
</tr>
<tr>
<td>Methods/models for determining species/habitat impacts, anticipated forms of take, and preliminary take metrics/triggers</td>
<td>2/14/23</td>
</tr>
<tr>
<td>Species/habitat impacts, take estimates</td>
<td>6/16/23</td>
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<tr>
<td>Anticipated benefits of flow-related conservation measures intended to minimize impacts</td>
<td>8/8/23</td>
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<tr>
<td>Preliminary biological goals/objectives, conservation measures, and adaptive management plan</td>
<td>10/20/23</td>
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### GRHCP Chapter

<table>
<thead>
<tr>
<th>GRHCP Chapter</th>
<th>Anticipated Date to TAG for Review</th>
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<tbody>
<tr>
<td>Chapter 1 – Introduction (Comments needed only on Section 1.2.5)</td>
<td>TBD</td>
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<tr>
<td>Chapter 2 – Environmental Setting (Comments needed only on Section 2.2.4)</td>
<td>TBD</td>
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<tr>
<td>Chapter 3 – Covered Activities (For information only, no comments needed)</td>
<td>TBD</td>
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<tr>
<td>Chapter 4 – Effects Analysis and Take Assessment</td>
<td>TBD</td>
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<tr>
<td>Chapter 5 – Conservation Strategy</td>
<td>TBD</td>
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TAG

Comments
Public Comments
Next Steps: Activities Planned for Second Half - 2022

• Next Stakeholder Meeting – December 2022

• Stakeholder input on:
  ▪ Water quantity and water quality analysis
  ▪ Modeling approaches
  ▪ Climate change assessments
  ▪ Impact assessment
Email questions or comments to GRHCP@GBRA.org

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