

**MEMORANDUM**

**To:** EARIP Steering Committee Members and Stakeholders

**From:** Robert L. Gulley  
Program Manager

**Date:** June 23, 2010

**Subject:** **Background for Agenda Items 11-12, 14-16, 18-19 for June 29-30, 2010 EARIP Meeting**

At the June 29 and 30 meeting, the EARIP will continue to discuss issues related to getting water to the species during a severe drought and begin to discuss issues related to the Endangered Species Act and the development of the Habitat Conservation Plan (“HCP”). This memorandum provides background information for the issues we will be addressing related to the Endangered Species Act and the development of the HCP (Agenda Items 11-12, 14-16, 18-19).

**ENDANGERED SPECIES ACT ISSUES**

The presentations on June 29 and 30 will be largely informational. You have had general presentations on some of the issues previously. However, now we are going to try to have the presentations and discussions focus specifically on the development of our HCP. The purpose of Agenda Items 11-12, 14-16, 18-19 is to prepare you for making decisions on ESA issues at subsequent meetings in the summer and early fall.

**1. Covered Species, Agenda Item 12**

**The purpose of Agenda Item 12 is to prepare for making decisions regarding whether to seek coverage for unlisted species that FWS is currently considering in the listing process.**

FWS defines “covered species” as “[u]nlisted species<sup>1</sup> that have been adequately addressed in an HCP as though they were listed, and are therefore included on the permit or, alternatively, for

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<sup>1</sup> We will not be discussing the whooping crane at this meeting. It is a listed species. It will have to be discussed as part of the Environmental Impact Statement (“EIS”) required by the National Environmental Policy Act (“NEPA”). NEPA, however, imposes no substantive requirements. Whether we have to address any impacts on the whooping crane will depend on whether FWS determines that the proposed action is likely to result in the “incidental take” of a whooping crane, jeopardize the continued existence of the crane or destroy or adversely modify its critical habitat. The EARIP will need to discuss whether there are any potential impacts of the covered activities at some point, perhaps early this fall.

which assurances are provided to the permittee that such species will be added to the permit if listed under certain circumstances.” U.S. Department of the Interior Fish and Wildlife Service and U.S. Department of Commerce National Oceanic and Atmospheric Administration national Marine Fisheries Service, “Habitat Conservation and Planning and Incidental Take Permit Processing Handbook”, November 4, 1996 at 8-1 (“HCP Handbook”). The inclusion of proposed, candidate, or unlisted species in an HCP is voluntary and is the decision of the applicant. HCP Handbook at 4-1.

If a covered species subsequently is listed, and the species is “adequately covered” by an HCP, the applicant is protected from the “take” prohibition in Section 9 of the ESA so long as it is complying with the terms of the HCP. HCP Handbook at 4-4. A species is “adequately covered” by the HCP, if the species is addressed in the HCP as if it were listed and the HCP contains measures that satisfy the issuance criteria for the ITP. *Id.* The key considerations in determining if an unlisted species can be covered by an HCP is the ability of the applicant to demonstrate both the impact of covered activities on the species and the ability of the applicant to provide conservation benefits for the species through the measures in the HCP.

If a species that is not included as a covered species and subsequently is listed, the permittee must avoid any take of the newly listed species or obtain “take” protection for that species through an amended or new permit.

There are a number of species that we may want to consider for including as covered species. Attachment 7 is a Federal Register notice regarding the “substantial information” 90-day finding in response to a listing petition for nine species of freshwater mussels (*i.e.*, that the petition warrants further evaluation). According to the Federal Register notice, four of the species have been found recently in the Guadalupe and San Antonio watersheds:

- False spike: The only known extant population occurs in the lower San Marcos River;
- Golden orb: currently it is known from the upper and central Guadalupe River, lower San Marcos River, and Lake Corpus Christi in the lower Nueces River drainage;
- Texas fatmucket: currently known from two tributaries of the Colorado River, the Llano River, upper San Saba River, and the upper Guadalupe River; and
- Texas pimpleback: currently, it is known from two tributaries of the Colorado River, the lower Concho and upper San Saba rivers, as well as the upper San Marcos River.

Attachment 8 is a list of species with “substantial information” 90-day findings in response to the 475 species listing petition. 74 Fed. Reg. 66,866, 66,872-74(Dec. 16, 2009) (Table 3). Some of the species on this list are found in the Edwards Aquifer (*e.g.*, toothless blindcat, widemouth blindcat, and Edwards Aquifer diving beetle). Other species on the list are associated with the spring systems (*e.g.*, Comal blind salamander and Comal Springs salamander)

Adam Zerrenner will give us a brief overview of the FWS listing process and the potentially relevant species from the 475 species listing petition. However, I suggest that we focus our discussion of covered species at this meeting on the freshwater mussels because FWS may soon make a determination regarding whether to propose one or more of the four species set out above for listing (perhaps by the end of the year), because I think that FWS is reasonably likely to

propose one or more of these species for listing, and because some of the species are currently believed to exist in the San Marcos and/or Guadalupe rivers.

We do not need to reach any decision on whether to include these species as covered species at this time. At subsequent meetings, we need to discuss other species for possible inclusion as covered species, such as the species with “substantial information” findings in response to the 475 species listing petition. **Our goal should be to reach a decision on Covered Species soon after completing our work on covered activities.**

## **2. Environmental Baseline, Agenda Item 14**

As we have discussed, FWS must consider the “environmental baseline” as part of its determination on the effects of the action in its biological opinion. FWS defines the term “environmental baseline” as:

[T]he past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process.

50 C.F.R. § 402.02.

FWS has described what it will consider in developing the environmental baseline for the biological opinion it will prepare for our HCP. However, I believe many of you may still be unclear as to what the environmental baseline for our HCP may look like. The purpose of the discussion on June 30 is not just to discuss the environmental baseline in the abstract but to give you a better sense of what constitutes the environmental baseline in the context of our HCP.<sup>2</sup>

As frustrating as it may be, the environmental baseline is not a particular flow number or something that is susceptible to a concise definition. Most often it consists of a narrative description of the species’ health at a specified point in time. As Adam Zerrenner recently explained, factors such as the status of the species, the status of delineated critical habitat, and the factors contributing to the current status of the species are included in that description.

To give you a better sense as to what the environmental baseline could look like for our biological opinion, I have attached as Attachment 9 a copy of the January 11, 2008 Biological Opinion regarding for the effects of Department of Defense’s well withdrawals from the Edwards Aquifer. **Please review pages 9-38 carefully before the meeting.** This Biological Opinion, in my view, provides a generally good discussion of the environmental baseline and is consistent with many of the other biological opinions with which I am familiar.

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<sup>2</sup> The decision as to what constitutes the environmental baseline is entirely a decision to be made by FWS. RECON, however, will include both in Chapter 3 of the HCP and as part of the EIS will provide the background information for FWS to use in making that determination.

For the EARIP, discussion probably should be included of the other factors that we have been discussing (*e.g.*, recreation) and the factors identified in the influence diagrams for the listed species. It also probably will need more discussion than the DoD Biological Opinion contained on issues such as the allowable versus actual pumping as well as the current critical period management rules.

Paul Fromer will briefly discuss the DoD environmental baseline, and then tell us how RECON intends to put together the information that could constitute the environmental baseline for our HCP, and discuss his timeline for developing this information.

### **3. Duration of the Incidental Take Permit, Agenda Item 16**

We should reach at least an interim decision now regarding the approximate duration of the permit we will be seeking. This decision will be helpful to Dr. Hardy and Bio-West in evaluating different flow levels. A final decision on the duration of the permit can be made when we decide what the covered activities will be.

FWS regulations sets out the following requirements it will consider in evaluating the duration of any permit proposed by an applicant:

The duration of permits issued under this paragraph shall be sufficient to provide adequate assurances to the permittee to commit funding necessary for the activities authorized by the permit, including conservation activities and land use restrictions. In determining the duration of a permit, the Director shall consider the duration of the planned activities, as well as the possible positive and negative effects associated with permits of the proposed duration on listed species, including the extent to which the conservation plan will enhance the habitat of listed species and increase the long-term survivability of such species.

50 C.F.R. 17.22 (b)(4). Permits terms for HCPs vary in duration from relatively short “interim permits” to permits covering up to 100 years.

The decision on permit duration requires a balancing of the effects of the uncertainty associated with a longer permit and the applicant’s need for closure. Uncertainty associated with the permit duration will play an important role in FWS’s decision regarding whether or not to issue the permit. For example, a longer permit term will increase the risk that a severe drought such as the drought of record will occur during the permit term. Thus, FWS may require greater assurances that the action will be protective during for a longer duration permit than it might require for a permit where the risk of such a drought is less.

Similarly, a permit term extending beyond 25-to-30 years will increase the likelihood that the effects of climate change will be realized during the permit term. Thus, FWS may use different assumptions regarding the amount of recharge in evaluating the effects of the action in the later years of a permit longer than 25-to-30 years. Moreover, it could require that measures be implemented to anticipate or mitigate the potential effects of climate change in the HCP. By

contrast, a permit with a duration of less than 25-to-30 years may only require a monitoring and adaptive management plan to address possible future climatic changes.

A robust adaptive management plan can go a long way towards addressing uncertainty concerns associated with a longer duration permit. But such a plan can be costly to carry out and require a commitment to implement changes before the nature and scope of the changes have been identified.

We need to weigh the possible effects of uncertainty against the fact that we are facing the prospect of expending a considerable amount of money. With that possibility in mind, it may be important to obtain as much closure as possible on the ESA issues even if the requirements of such a permit are more onerous.

**To assist Dr. Hardy and Bio-West, and RECON in their efforts, I suggest that we try to develop a sense of the group now as to whether we are interested in pursuing a permit that extends beyond 25 years. We can reserve a decision on the actual duration of the permit until after we learn about the results of the HDR work.**

The remaining “Endangered Species Act” items on the Agenda (Items 18 and 19) are largely informational and self explanatory.

#### **AGENDA FOR THE JULY 27-28, 2010 EARIP MEETING, AGENDA ITEM 20.**

Our next meeting in July is currently scheduled for two days.

The most significant issue at that meeting will be Dr. Hardy’s report on the results of his model run. We also will receive a proposed brush management pilot study for discussion and possible decision. Rader Gilleland will present the results of studies conducted on behalf of Southwest Texas Water Resources L.P. on the effects of the Uvalde pipeline project on springflow. Larry Hoffman will also present a springflow augmentation approach for discussion.

Further, the Conservation Work Group probably will be in a position to give a report on its activities. Halff Associates also may be ready to give a presentation to the EARIP on the results of the recreation study. In addition, we may have a recommendation of the snail pilot project to consider.

We also need to discuss the possibility of including species from the 475 listing petition as covered species and revisit the issue of who will be the applicant(s) on the permit.

As you can see, we probably have enough to do to usefully fill one and one half-to-two days.