

Required Components of HCPs: The Science Advisory Committee's Role in Providing Scientific Support

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Overview of HCP Components

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- **Species Covered**
- **Activities Covered**
- **Biological Impacts/Take**
- **Conservation Program Measures**
- **Alternatives**
- **Changed and Unforeseen Circumstances**
- **Appendices**

Species Covered: **Animals**

- Federally listed, proposed, and candidate
- State listed, other species at risk
- At least 1 listed animal for HCP

Species Covered: **Animals**

- Six focal species selected by SAC in 2005
- Species accounts drafted for all six
- Surveys, 2006 SAC meeting to identify other spp.
- GIS meeting

Accomplishments

Species Covered: **Animals**

- Prioritize other species to be covered
- Species accounts (abbreviated?)
- Knowledge of ecological requirements
- Updated surveys, occurrence records
- Monitoring strategies

Needs

Species Covered: **Plants**

- ESA (Section 9) prohibits take of plants on Federal lands, or non-federal lands if covered by state law
- Section 10 permit requires Section 7 consultation
- ESA (Section 7) prohibits jeopardy, which applies to both plants and animals

Species Covered: **Plants**

- Cumberland rosemary, Virginia spiraea (high)
- White fringless orchid (moderate)
- Cumberland sandwort (low)

Accomplishments

Species Covered: **Plants**

- Prioritize species to be covered
- Species accounts
- Knowledge of ecological requirements
- Updated surveys, occurrence records
- Monitoring strategies
- More plant expertise on SAC
- Partnerships with plant researchers

Needs

Activities Covered

- Are likely to result in incidental take
- Are reasonably certain to occur over the life of the permit
- Applicant or land owner has some form of control

Activities Covered

- Development Team and SAC 2005
- Water Resources and Forest Resources HCPs
- Threats ID through surveys

Accomplishments

Activities Covered

- Relationships between activities and species

Needs

Biological Impacts/Take

- Take must be quantified for each covered species
- Individuals or habitat
- Plants treated same as animals
- Cumulative impacts

Biological Impacts/Take

- Confidence in take due to land uses rated by SAC 2006 meeting and surveys
- GIS meeting
- Focal species working group meetings began assessing take (spotfin chub)

Accomplishments

Biological Impacts/Take

- Continue working groups
- Form new groups for other species
- Different approaches for estimating take
- Research/modeling
- Form cumulative impact working group?

Needs

Conservation Program Measures

- Biological Goals: broad guiding principles, rational behind minimization and mitigation strategies
- Biological Objectives: measurable targets for achieving the biological goals
- Adaptive Management Strategy: involves monitoring and reports

Conservation Program Measures

- Measures for minimization, mitigation, and monitoring suggested in surveys and SAC 2006
- SAC attending CAP workshops
- Cerulean warbler group

Accomplishments

Conservation Program Measures

- Working groups for biological goals and objectives
- Same working groups for adaptive management and monitoring strategies

Needs

Alternatives

- HCP document requires alternative actions to take
- Must estimate take for the alternatives
- Provide reasons for not selecting alternatives

Alternatives

- Species working groups aid in estimation of take for alternatives

Needs

Changed and Unforeseen Circumstances

- HCP requires detailed description of all reasonably foreseeable circumstances
- Fire, hurricane, listing of new spp.
- Changes in circumstances that could not be reasonably anticipated

Changed and Unforeseen Circumstances

- Species working groups should address changed and unforeseen circumstances?

Needs

Appendices

- Some information more appropriate here
- Numerous and/or lengthy species accounts

Appendices

- Detailed species accounts 6 focal species

Accomplishments

Appendices

- Accounts for other species?

Needs

Species Working Groups

- Take estimation
- Cumulative impacts
- Biological goals/objectives
- Data/uncertainties
- Alternatives
- Changed circumstances

Needs

Without the science, there would be no HCP.

