Independent Scientific Input for Natural Community Conservation Planning

California
Department of Fish and Game
NCCP Act

requires independent scientific input on…

- Conservation strategies
- Reserve design principles
- Monitoring and adaptive management
- Data gaps and uncertainties
Purpose

- Technical Success
- Public credibility
- Legal defensibility
Key Concepts from the NCCPA

♦ Best Available Scientific Information

♦ Independent Scientific Input
Best Available Scientific Information
(obtained by scientific method)

- Valid methodology
- Quantitative analysis
- Logical conclusions
- Proper context
- Credible references
- Anonymous peer review
What is “independent”?

- Qualified experts who are independent from:
  - Lead agencies
  - Consultants
  - Permitting agencies
  - Stakeholders
  - the collection of preliminary data.
Independent scientific input for NCCPs is the same, but different…

- Recognized experts
- Foundational principles, not terminal review
- Advice is used by all parties
Science Advisors

- Conservation biologists and landscape ecologists
- Species/habitats experts
- Experts on ecological processes
- Balanced range of technically legitimate perspectives
Mechanics of NCCP Scientific Input

- Scope of work
- Professional facilitator
- Invitation of advisors
- Lead scientist
- Two-day workshop (field trip?)
- Written report
- Possible other requests for assistance
Types of Advisor Recommendations

♦ “Tools not Rules”
  – Conceptual
  – Technical
  – Applied
Examples of Useful Advisor Recommendations

♦ Conceptual
  – Geographic scope of planning area
  – Ecosystem models
  – Landscape-level conservation principles
  – Locally-relevant reserve design principles

San Diego MSCP Reserve
Examples of Useful Advisor Recommendations (cont’d.)

♦ Technical information
  – Mapping methodology
  – Species and community distributions
  – Species-habitat relationships
  – Natural disturbance regimes
  – Critical ecological processes

Maintain sand delivery system in Coachella Valley
Examples of Useful Advisor Recommendations (cont’d.)

♦ Applications
  – Habitat Evaluation Model
  – Monitoring program
  – Adaptive management
  – Levels of risk
  – SITES model
Lessons Learned

♦ Scientific input is not free
♦ Get scientific advice early
♦ Let advisors work in private
♦ Focus the advisors with questions
♦ Use their advice
For more information on…

- NCCP program and plans
- NCCP science advisor reports
- Guidance on NCCP science process

www.dfg.ca.gov/nccp/