USING EXISTING ENVIRONMENTAL MANAGEMENT PROGRAMS

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Introduction

- **Mitigation and management of CEs needs major attention in CEA**
- **CEQ Step 10 – Modify or add alternatives to avoid, minimize, or mitigate significant cumulative effects**
- **CEQ Step 11 – Monitor the cumulative effects of the selected alternative and adapt management**
- **CEAA Step 3 – Recommend mitigation measures**
- **CEAA Step 5 – Recommend regional monitoring and effect management**

Premises

- **Consider mitigation as referring to the incremental effects of the proposed action and alternatives being addressed by the CEA (consider such effects by VEC)**
- **Consider management as referring to addressing the combined effects of multiple actions on specific VECs**
- **Existing environmental and natural resources management programs may include features which can be applied to both mitigation and management**

- **Project proponents may want to consider the enhancement of resources (if opportunity exists to go beyond the minimum)**
- **Cause-and-effects pathways with the greatest contributions should be given the greatest priority**
- **Intra-and inter-agency collaboration, along with stakeholders involvement, is important**

USEPA "Policy" (1999)

- **Project proponent must mitigate incremental impacts (minimum requirement)**
- **Proponent is "encouraged" to collaborate with other contributors and relevant agencies and explore options to decrease CEs**

FHWA "Policy" (2002)

- **Mitigate incremental impacts of the highway project which are "within the control of the proponent agency" – direct effects and some indirect effects related to locational issues (minimum requirement)**

- **Identify other possible mitigation measures "outside the control of the proponent agency" and explore collaboration – examples are typically related to indirect effects (examples include zoning/comprehensive planning, "growth management regulations and policies", etc.)**

Incremental Effects Mitigation Tools

- Air and water pollutant emissions standards and controls (technology and BMPs)

- Emissions trading (air) and discharge trading (water quality)
- Water use (water rights) allocations
- Permits with included “conditions” such as monitoring/reporting and response strategies
- Cultural resources approvals

- **Definition of mitigation (USA) – avoidance of effects, minimization of effects, rectification of effects (e.g., repairing, restoring), reduction of effects (e.g., preservation and maintenance), and compensation for the effects (e.g., by replacing or providing substitute resources or environments)**

Sequential consideration

Regional Management Tools

- **Project applications and reviews – EISs and various permits**
- **Land use and environmental planning systems**
  1. **Regional land use plans**
  2. **Regional access management**
  3. **Linear corridor controls (highways, pipelines, transmission lines, etc.)**
  4. **Regional transportation strategies**

- Community conservation (land use) plans
- Regional cooperative programs
- Protected spaces planning
- Development scenario forecasting

- Resource management systems – species management plans, habitat conservation plans, watershed management, wildlife management, resource extraction controls, and national/international agreements (as appropriate)

- **Scientific and knowledge based systems – regional GIS mapping, incorporation of traditional knowledge, regional ecological monitoring, and identification of thresholds**

AXYS (2000)

Challenges in Management

- **Technical – establishing reasonable spatial boundaries; lack of resource thresholds; predicting effects of induced projects; and establishing reasonable expectations in addressing future activities and activities that are infrequent and randomly dispersed (e.g., mineral exploration).**
- **Regulatory – extent and complexity of jurisdictional authority; and clarifying responsibilities of government, proponents and communities.**

- **Logistical – identifying key environmental and social components to be studied and considered; and lack of adequate baseline information.**
- **Social – obtaining involvement and support of all stakeholders; and obtaining a clear and publicly approved vision of appropriate land use.**

AXYS (2000)

Examples: VEC-Related

- Pollution prevention and waste minimization
- Trading programs (USEPA plus states) – water quality (discharge) and TMDLs, allowance and emissions (SOx, NOx, etc.), and cap-and-trade (greenhouse gases)
- Land use and resource management plans – USFS, BLM, DOD (e.g., INRMPs, ICRMPs, ESMPs, WRMPs, encroachment zones, etc.)
- Tradable land use (development) rights
- Conservation planning/banks

- **Emission offsets (Western Australia)**
- **Wetlands/aquatic resources**
  1. **Mitigation banking (1995 – federal policy)**
  2. **In-lieu-fees (2000)**
  3. **Compensatory mitigation for losses of aquatic resources (2008)**
- **Ad hoc committees**
  - **Sonoran pronghorn at YTRC**
  - **Desert tortoise (Southern California)**

- **Potential “tools”**
  - **Monitoring and adaptive management**
  - **Habitat Equivalency Analysis**
  - **Environmental Management Systems**

Examples: “Local” Agencies

- ORSANCO
- River basin management agencies
- Air control districts and regions
- Riparian habitat?
- Conservation easements and banks
- Ground water management districts
- Coastal and estuarine zone commissions
- Management entities for critical habitat (e.g., Marine Sanctuaries)

Values of Collaboration

- Country to country, state to state, intrastate (mix of agencies)
- Some benefits are:
  1. information sharing
  2. integration of ideas, agency personnel
  3. joint funding
  4. joint fact finding (monitoring)
  5. facilitates implementation
  6. reduces litigation

- **Spectrum of collaboration – inform, consult, involve, and collaborate**
- **Challenges in collaboration**
  - **resource requirements for collaboration**
  - **conflicting missions**
  - **overcoming culture of non-collaboration**
  - **laws; e.g., Federal Advisory Committee Act**

Ad Hoc Entities

- Agency for _____
- Expand existing one (ORSANCO)
- Things needed for successful collaboration:
  - shared vision (“rally around ____”)
  - trust between collaborators (no hidden agendas)
  - early and open communication
  - some plan (commitment) for continuity
  - no dictatorial bosses
  - env. mediation (env. disp. resolution)

Models for CEs Mgmt.

- 1 – Governmental agencies with coordination between them
- 2 – Single governmental agency
- 3 – 1 plus stakeholders (industry) involvement
- 4 – 2 plus stakeholders (industry) involvement
- 5 – Regulated community (industry) with reporting to 1 or 2

Lessons Learned

- **VEC-based approach to CEs mitigation and management may be best**
- **Many programs and organizations already exist; the challenge is to sort them out by authorities and responsibilities**
- **Collaboration is a foundation element**