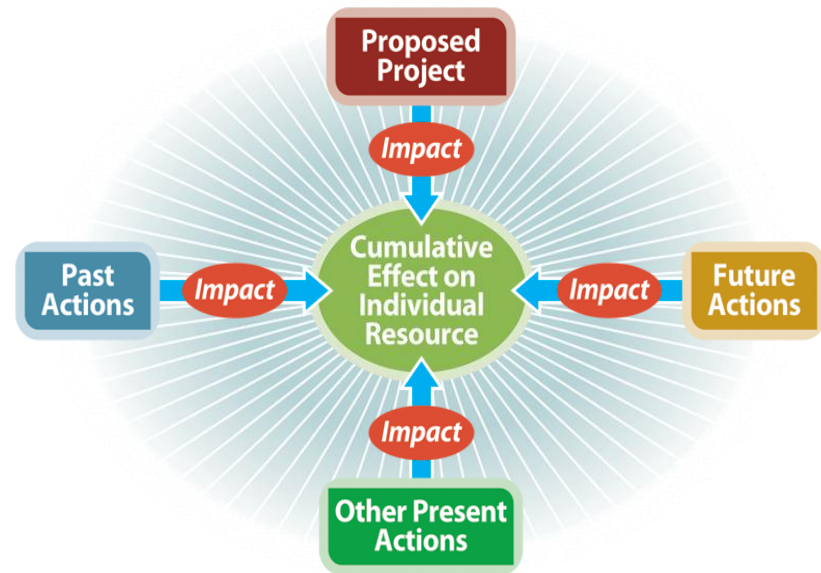
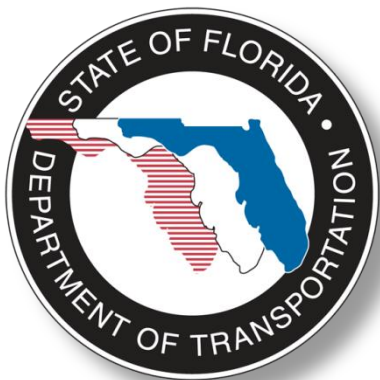


Cumulative Effects Evaluation



ETAT Workshop 2011



George Ballo
Community Resources Administrator

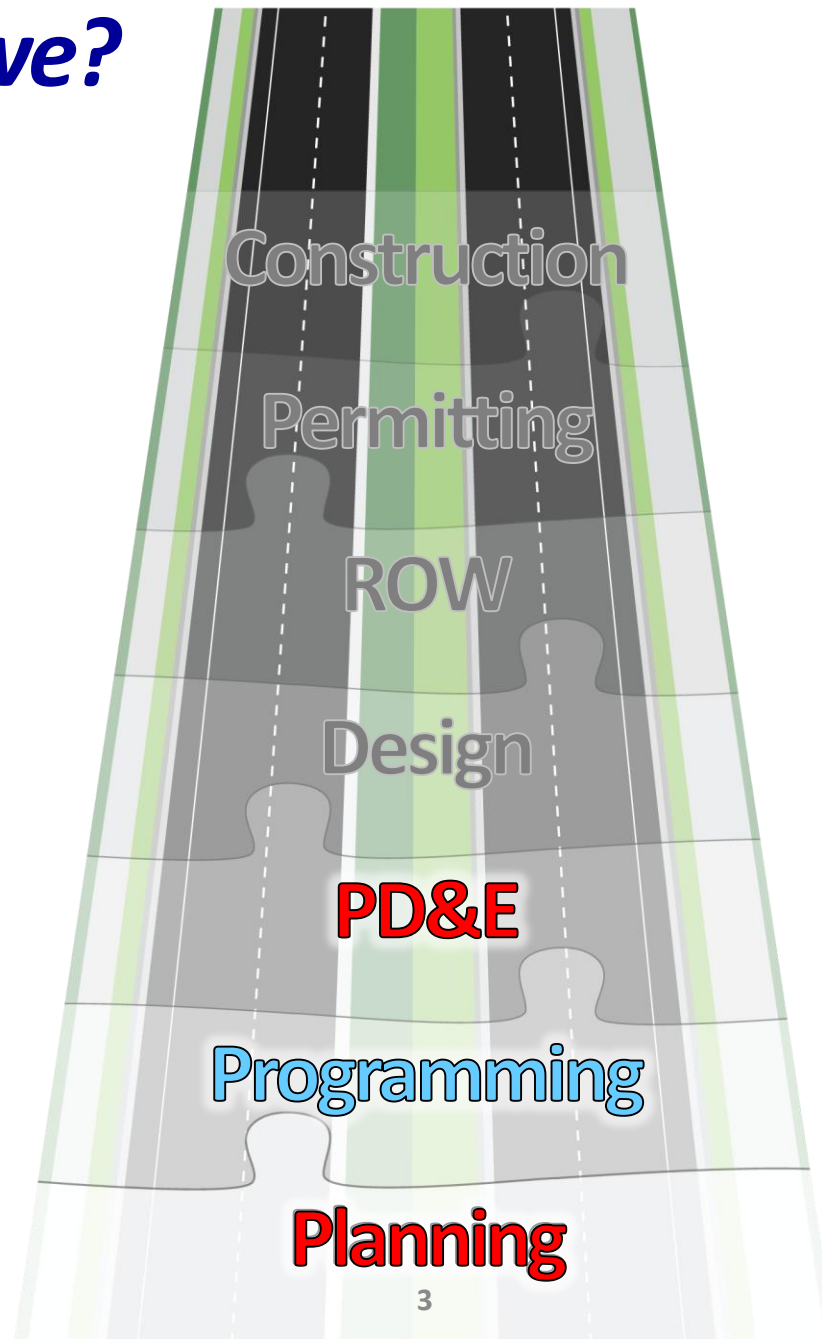


Topics

- ◆ Where does CEE occur in the project delivery process?
- ◆ What are cumulative effects ?
- ◆ What is our CEE Process?
- ◆ What does FDOT need from the ETAT?
- ◆ What can you expect to see as we move forward?



Where are we?



What are Cumulative Effects?



NEPA Definition

Cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Council on Environmental Quality (CEQ) (40 CFR § 1508.7)



Others

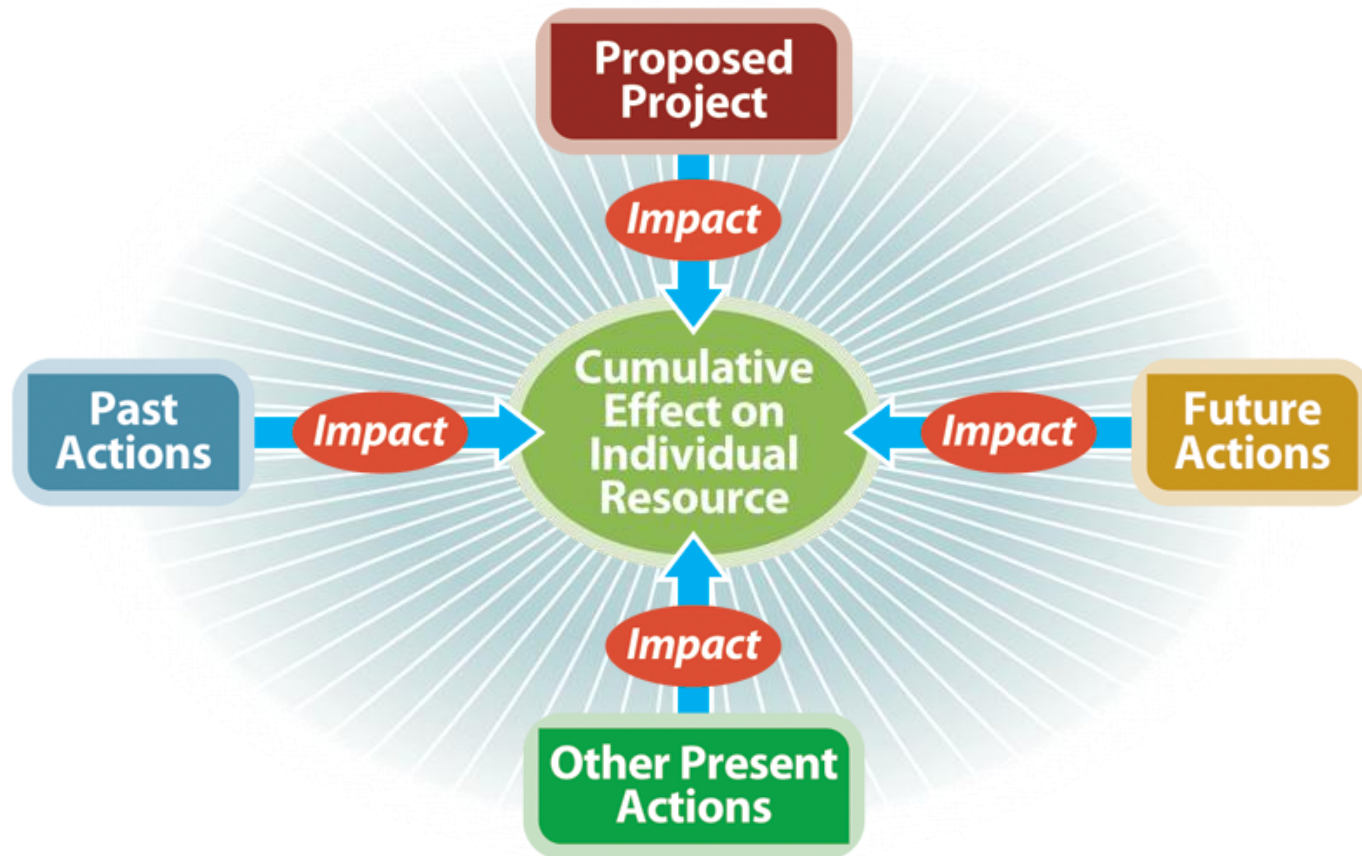
- ◆ Endangered Species Act
- ◆ National Historic Preservation Act
- ◆ Florida Water Resources Statute (Ch. 373)



Consider requirements of other laws when preparing cumulative impact analyses intended to serve multiple purposes.



Cumulative Effects



Cumulative Effects = (Direct Effects + Indirect Effects) of Many Actions

Focus on Meaningful Effects

- ◆ No need to study the universe
- ◆ Narrow the focus to resources at risk
- ◆ Based on thorough scoping



***CEQ, Guidance on the Consideration of Past Actions
in Cumulative Effects Analysis, 2005***

Past Actions

- ◆ Not necessary to list individual actions
- ◆ Begin when land use development first began affecting environment
- ◆ Consider impacts of all types of projects
- ◆ May be qualitative when not quantifiable



***CEQ, Guidance on the Consideration of Past Actions
in Cumulative Effects Analysis, 2005***



Reasonably Foreseeable Actions

“Sufficiently likely to occur, that a person of ordinary prudence would take it into account in making a decision”

*Sierra Club v. March, 976 F.2d 763, 767
(1st Cir. 1992)*

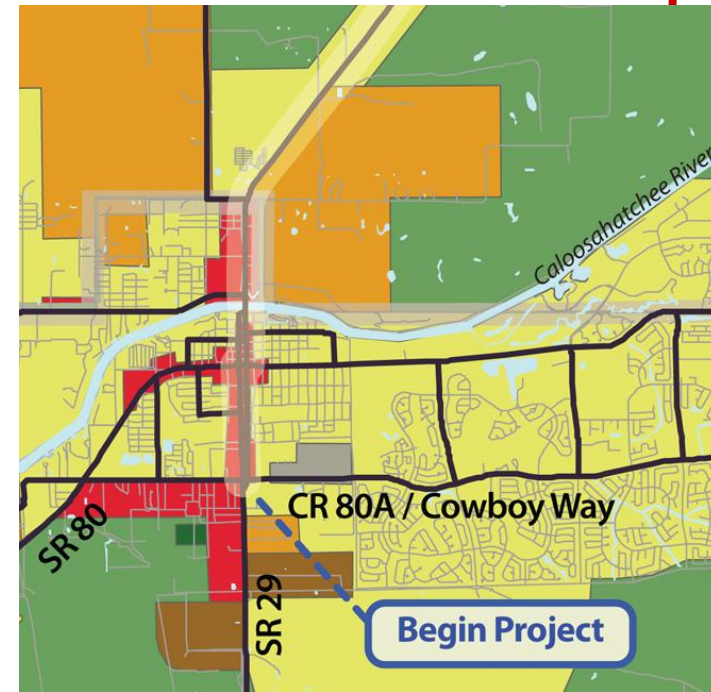
Indicators – approved actions, funding pending, evidence of active preparation.

*Clairton Sportsmen's Club v. Pennsylvania
Turnpike Commission, 882 F. Supp 455
(W.D. Pa 1995)*



Sources of Future Actions

- ◆ Local Government Future Land Use Plans
- ◆ Developments of Regional Impact
- ◆ Urban Service Area Boundaries
- ◆ Transportation capacity improvements from Cost Feasible plans



...others?



What is Our Approach to Cumulative Effects Evaluation?



Recommended CEE Process

Step 1 Initiate Cumulative Effects Evaluation

Step 2 Identify Resources of Concern

Step 3 Define the Study Time Frame

Step 4 Determine the Potentially Affected Resource Area (PARA)

Step 5 Evaluate Past and Present Impacts on the Resource

Step 6 Evaluate Potential Effects of Reasonably Foreseeable Future Actions

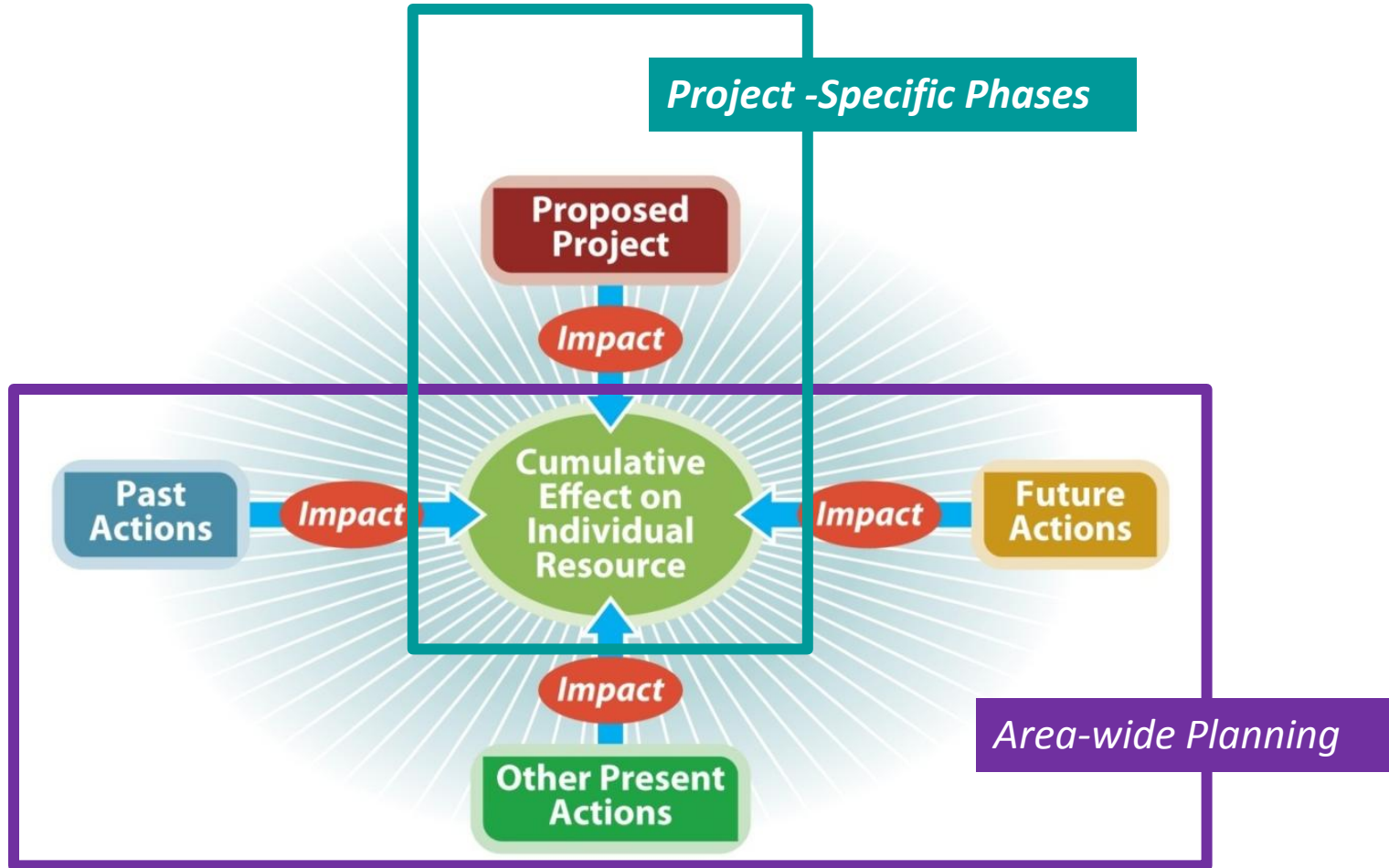
Step 7 Add the Incremental Effects of Build Alternatives under Consideration

Step 8 Assess Potential Mitigation Measures

Step 9 Document Cumulative Effects



Timing of the Analysis



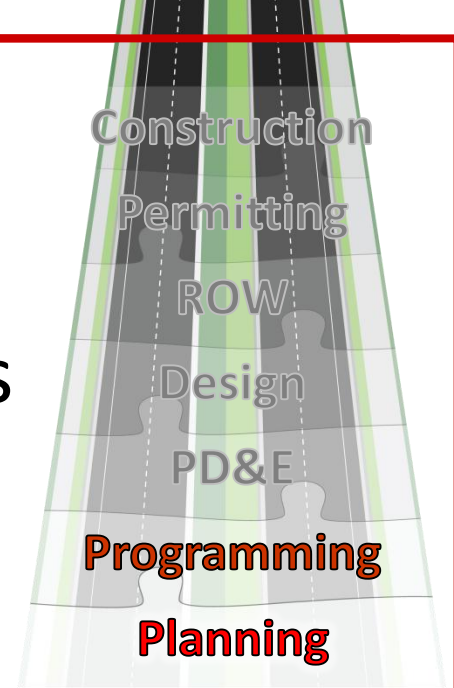
How does CEE fit into the ETDM Process?

etdm



CEE Considerations

- ◆ Resources at risk
- ◆ Geographic boundary of these resources
- ◆ Resource management plans for these resources
- ◆ Future foreseeable activities affecting these resources
- ◆ Avoidance, minimization or mitigation concepts



PD&E Phase

FHWA, Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process, 2003

Categorical Exclusion – *Rarely required*

Environmental Assessment – *Generally required*

Environmental Impact Statement – *Required*

No Federal action:

State Environmental Impact Report – *Usually not required*



Legally Sufficient CEE

“The analysis sets the geographic and time boundaries of the cumulative impacts assessment. It then summarizes the existing condition of each potentially affected resource. The analysis summarizes the impacts from the Proposed Bridge on each potentially affected resource and identifies other current and reasonably foreseeable future actions and their possible impacts on those resources. Finally, the analysis discusses the potential for cumulative impacts on the resources and mitigation or minimization measures.”

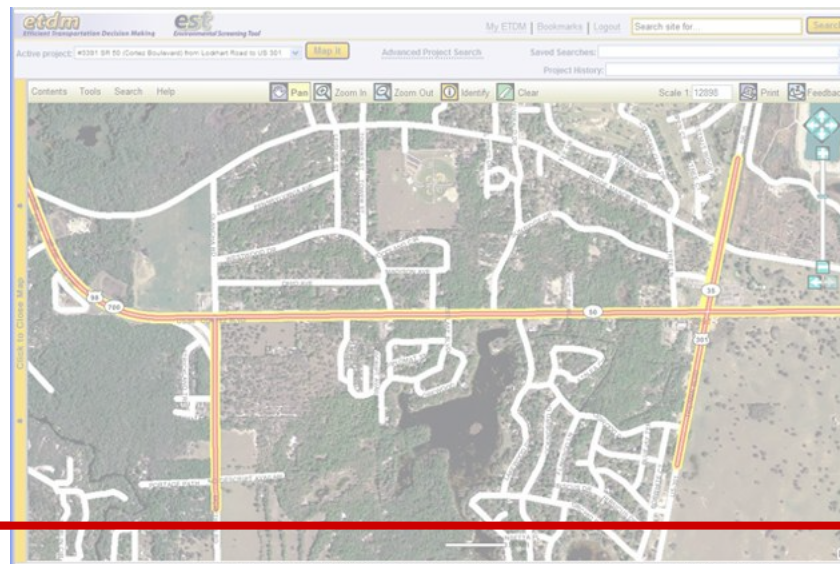
“This approach constitutes a meaningful cumulative impact analysis.”

- Sierra Club North Star Chapter v. Peters (3/11/2010)



Future Updates to the EST

- ◆ Separate comment forms for Indirect and Cumulative Effects
- ◆ No degree of effect for cumulative effects
- ◆ New GIS analyses
- ◆ Map Editing tools to support resource-based analysis



For More Information



George Ballo

george.ballo@dot.state.fl.us

850-414-5327

CEE References

- ❖ NCHRP, Legal Sufficiency Criteria of Adequate Indirect Effects and Cumulative Impacts Analysis as Related to NEPA Documents
- ❖ CEQ, Considering Cumulative Effects under the National Environmental Protection Act
- ❖ AASHTO, Practitioner's Handbook #12 Assessing Indirect and Cumulative Effects under NEPA

