Avoiding Improper Segmentation and Accounting for Cumulative Impacts During Deployment of a Broadband Infrastructure

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Washington, D.C.
July 2012

Capstone paper submitted in partial fulfillment of the

Requirements for the Certificate in NEPA

Duke Environmental Leadership Program

Nicholas School of the Environment at

Duke University

2012

Introduction

On February 17, 2009, President Obama signed the American Recovery and Reinvestment Act of 2009 (Recovery Act) into law.[1] The essential goal of the Recovery Act is to provide a ''direct fiscal boost to help lift our Nation from the greatest economic crisis in our lifetimes and lay the foundation for the future."[2] One of the key strategies the Recovery Act uses to achieve this goal is to invest in public infrastructure that will provide long-term economic benefits.[3] Consistent with this strategy, the Recovery Act recognizes the growing importance of access to broadband services to economic development and to the quality of life of all Americans.[4]

Accordingly, the Recovery Act appropriates $4.7 billion [5] to deploy broadband infrastructure to enhance broadband access through the country. [6] The National Telecommunications and Information Administration (NTIA) established the Broadband Technology Opportunities Program (BTOP) to grant funds to states, non-profits, and for-profit entities to construct this nationwide network and provide oversight over grant project activities. The majority of BTOP funding was provided in three project categories: (1) Comprehensive Community Infrastructure: Projects to deploy new or improved broadband Internet facilities (e.g., laying new fiber-optic cables or upgrading wireless towers) and to connect "community anchor institutions" such as schools, libraries, hospitals, and public safety facilities. These networks help ensure sustainable community growth and provide the foundation for enhanced household and business broadband Internet services; (2) Public Computer Centers: Projects to establish new public computer facilities or upgrade existing ones that provide broadband access to the general public or to specific vulnerable populations, such as low-income individuals, the unemployed, seniors, children, minorities, and people with disabilities; and (3) Sustainable Broadband Adoption: Projects that focus on increasing broadband Internet usage and adoption, including among vulnerable populations where broadband technology traditionally has been underutilized. Many projects include digital literacy training and outreach campaigns to increase the relevance of broadband in people's everyday lives.[7]

BTOP NEPA Review Process

A total of 233 projects received BTOP funds and are required to fully complete projects no later than three years following the date of the issuance of the award.[8] As federally funded

projects, NTIA, as the awarding agency, is required to account for the potential environmental impacts of BTOP projects, as prescribed by the National Environmental Policy Act (NEPA).[9] In response to this mandate, NTIA developed and implemented a NEPA review process before awarding any grant funding.

First, in 2009,[10] prior to the grant application phase, NTIA, coordinating with the Council on Environmental Quality (CEQ), established BTOP specific Categorical Exclusions (CEs) for actions the agency has determined do not individually or cumulatively have a significant effect on the human environment and thus, could – absent any extraordinary circumstances – be excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS) under NEPA.[11]

Next, during the pre-award phase and as part of the application process, all BTOP applicants were required to complete an Environmental Questionnaire (EQ) that included a narrative project description, project mapping, and responses to a list of questions that provided a baseline to evaluated each projects potential impact on the different environmental and cultural resources in the ecosystem where project implementation activities where proposed.[12] NTIA utilized the EQ to conduct a NEPA analysis and determine the appropriate NEPA documentation that would be required for each proposed project and provided a recommendation, based on this analysis, for funding of the selected applications.

Finally, after an applicant was awarded funding and for projects that were not categorically excluded from further NEPA review, funds were withheld under a special award condition requiring the awardees to complete and submit an EA that sufficiently assesses that environmental impacts that would likely result from the project. Each EA described the proposed project activities and reasonable alternatives, identified the ecosystem and individual environmental and historic resources in the project, and analyzed the project potential effects on the environment. Based on a review of the analysis in the EA, NTIA determined whether the project, implemented in accordance with the preferred alternative in the EA, would result in any significant environmental impact. After this sufficiency review, NTIA would adopt the EA and use it as a basis for finding the project will not have significant impact on the environment, determining the preparation of EIS was not required, and issuing a Finding of No Significant Impact (FONSI). Following the issuance of the FONSI, NTIA would authorize a BTOP grantee

to begin project implementation activities subject to any protocols or identified environmental protection measures relied upon to determine the project would not have significant impact on the environment.

Questions Presented

The implementation of this review process resulted in 133 of the projects being categorically excluded from further NEPA review. The remaining 100 projects had a special award condition requiring completion of an EA and issuance of FONSI prior to being approved for project construction. Although NTIA has issued a FONSI for the majority of awards, two issues have been presented during the construction phase of these projects.

First, the majority of construction projects, for various reasons, have required route modifications that were not originally evaluated in the EA. NTIA identified these changes, if not properly accounted for, could result in improper segmentation of BTOP projects. In response, NTIA developed a route modification process in order to properly account for and analyze these project modifications. Thus, a policy question remains as to whether this process sufficiently results in the projects avoiding improper segmentation and remaining in compliance with NEPA.

Second, the deployment of these networks has resulted in many entities expressing interest in connecting directly into BTOP funded networks, even before construction of a single project is complete. As a result, a questions remains as to whether these connections where reasonably foreseeable and should have been considered as part of the original cumulative impact analysis of the EA.

The objective of this paper evaluated whether NTIA has properly accounted for and avoided improper segmentation resulting from continuing project modifications and whether NTIA sufficiently accounted for recently proposed interconnections in the original cumulative impacts analysis of a project's EA.

Improper Segmentation

NEPA requires that federal agencies consider the environmental consequences of their decisions before they act, and to prepare a detailed statement of major federal actions significantly affecting the quality of the human environment.[13] This statement must address the environmental impact of a proposed action, the unavoidable environment impacts if the action is

approved, alternatives to the proposed action, the relationship between short and long-term effects, and any irreversible commitment of sources if the proposed action is implemented.[14] Under NEPA, the Council on Environmental Quality (CEQ) was created, to assist in the development of the nations policies to meet the purposes of NEPA. [15] CEQ promulgated regulations establishing the NEPA environmental review process.[16] The CEQ regulations provide that a federal agency may only be required to complete the NEPA review process when its involvement in a project is sufficient to constitute a "major federal action."[17] Actions include new and continuing activities, including projects entirely or partly financed by a Federal agency where there is some Federal control over the subsequent use of the Federal funds.[18] CEQ regulations define a "major federal action" as actions with effects that may be major and which are potentially subject to federal control and responsibility.[19] Although there is no definitive litmus test for determining what constitutes a major federal action, a project utilizing federal funds is generally considered a major federal action when there is the potential for significant environmental impact.[20] Thus, federally funded projects that significantly affect the quality of the environment must be accompanied by a NEPA review (CE, EA, or EIS) that considers the reasonably foreseeable effects on the environment.[21] This environmental analysis is intended to evaluate the entire scope of a single and complete project. However, when a federal action is divided and analyzed into smaller separate components it is known as "segmentation."[22] Since all projects must start and end somewhere, project components may have independent utility and can be considered individually under NEPA.[23] However, when an agency intentionally attempts to circumvent NEPA by dividing a federal action into smaller components in order to allow those smaller components to avoid studying the overall impacts of the single project then "improper segmentation" has occurred.[24] Thus, it is unlawful for agencies to evade their responsibilities under NEPA by artificially dividing a major federal action into smaller components, each without significant impact. To permit non-comprehensive consideration of a project divisible into smaller parts, each of which taken alone does not have a significant impact, but which taken as a whole has significant impact, would provide a clear loophole in NEPA.[25]

Typically, situations involving improper segmentation occur where a major federal action is found to exist and the segment in question is analyzed in order to determine whether the particular segment has been separated from the whole to prevent the application of NEPA to that segment.[26] For example, where an agency prepares separate NEPA analyses for two segments of

a highway that have logical starting and stopping points only when considered together as a single project. Alternatively, an agency could improperly segment critical portions of a proposed project before the project was developed to the stage of becoming a major federal action. For example, if a circumferential freeway is planned and each segment cannot stand on its own without the construction of any other segments, but certain segments have environmental sensitive habitat that require extensive studies and those segments are separated from the project in order to allow early construction of the segments not in environmentally sensitive habitat.

In order to provide additional clarity on the issue, the courts have developed a four-factor test to determine whether improper segmentation has occurred. These factors include whether the proposed segment: (1) has logical termini; (2) has substantial independent utility; (3) does not foreclose the opportunity to consider alternatives; and (4) does not irretrievably commit federal funds for closely related projects.[27] While all factors have a modest weight, the analysis of a projects independent utility is the primary focus and the key factor in deciding most improper segmentation cases.

First, the project must have a "Logical termini" for project development is defined as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts.[28]

Second, independent utility is determined by whether a project segment had an independent function, even if a no other segment of a project was constructed. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility.[29] Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility. Simply, put when the segmented project has *no* independent jurisdiction, no life of its own, or is simply illogical when viewed in isolation, the segmentation will be held invalid."[30] Consequently, while all factors have a modest weight, the analysis of a projects independent utility is the primary focus and key factor of the most improper segmentation determinations.[31]

The final two factors require that the project not foreclose the opportunity to consider alternatives nor irretrievably commit federal funds for closely related projects.[32] These factors are intended to demonstrate that there is no clear nexus between the projects that would limit the

federal government's ability to properly scope[33] the project and evaluate other alternatives as required by NEPA and to protect federal funds against the waste, fraud, or abuse.

BTOP Adaptive Management

Many BTOP funded grant projects, after adoption of the EA and issuance of the FONSI, have required project modifications resulting from a variety of factors, including changes in engineering design, actual field conditions, changing business requirements, or unanticipated environmental factors. In some cases, these proposed project modifications require changes in the proposed construction route, proposed changes in technology, and changes in proposed construction/installation methods and are in locations or include activities not previously evaluated in the EA or considered in the original environmental analysis. NTIA recognized these modifications, if not properly analyzed, could potentially result in improper segmentation.

Specifically, NTIA identified that projects modifications could result in the proposed networks no longer having an independent utility because the original projects proposed would start to be broken into segments that could potentially have *no* independent jurisdiction or no life of its own.

Additionally, if the project modifications did not receive a NEPA analysis it could be argued that NTIA unlawfully evaded their responsibilities under NEPA by artificially dividing a major federal actions into smaller components, each without considering the environmental impact. As a result of its identification of this issue and the continued monitoring of BTOP projects, NTIA developed and utilized an adaptive management approach to analyze project modifications and provide flexibility to adjust to any unanticipated impacts during project implementation and to ensure project compliance with NEPA. The *BTOP Environmental Project Modification Review Process*[34] allowed the agency to analyze the potential environmental impacts of a project modification and include supplemental environmental analysis for all project modifications in order ensure the projects remained NEPA compliant including ensuring avoidance of improper segmentation.

BTOP Environmental Project Modification Review Process

NTIA's overall review of project modifications focuses on the complete scope of the project including technical, budget, compliance with grant agreements, and environmental & historic preservation (EHP) compliance.

The EHP compliance review for BTOP project modifications is necessary to maintain NEPA compliance, as well as, compliance with applicable regulations and in accordance with existing, project-specific EHP documentation already produced for individual projects. The EHP compliance review may require several possible actions by recipients and may result in one of several possible levels of additional environmental analysis and documentation.

The first step to determine whether a proposed project modification will require EHP action or documentation is to conduct an EHP pre-screening review, during which the BTOP EHP Team will review the proposed change concurrently with the Federal Program Officer (FPO) to determine if the proposed modification would have "substantive" or "non-substantive" impacts or effects on EHP resources. This review will determine the type of documentation necessary to maintain EHP compliance under the National Environmental Policy Act (NEPA) and any cross-cutting environmental laws or regulations. Such additional compliance documentation could include a simple memorandum for the record (MFR), additional regulatory consultation, a supplemental environmental assessment (EA), a new EA, or an environmental impact statement (EIS). Recipients were notified that they were not authorized to begin any work on the proposed project modifications or proposed route segments until NTIA fully approves the requested project modification, including finally approving and adopting any necessary supplemental EHP documentation.

NTIA reviews each proposed project modification to the preferred alternative contained in the final EA based on information provided by the recipient to determine whether the proposed modification will result in a substantive impact on EHP resources. BTOP recipients proposing project modifications are required to submit the following documentation to assist NTIA with review of the proposed modifications:

1. **Project Modification Narrative:** The recipient should fully describe and discuss the proposed change(s) to the project and how they are different from the originally proposed project (which was analyzed in the original EA) including a description of how the proposed changes differ from what was evaluated in the EA.

2. **Project Modification Map:** The recipient should provide a project map clearly depicting the originally approved project as described in the final EA and the proposed changes to the original project.
3. **NTIA EHP Pre-Screening Criteria Checklist for Proposed Project Modifications:** The recipient must provide a complete response to the information requested on the NTIA EHP Pre-Screening Criteria Checklist for Proposed Project Modifications NTIA developed the EHP Pre-Screening Criteria Checklist to assess proposed project changes, determine whether the changes are substantive, and make a recommendation about the level of supplemental EHP documentation that may be required.

Upon submission and review of the of the EHP pre-screening materials, the BTOP EHP Team will conduct a NEPA review and determine the level of additional environmental analysis or EHP documentation required. This includes an environmental reviewer analyzing the proposed modification in conjunction the original environmental documentation to determine the potential environmental impact the modification. In the course of this review and in addition to reviewing the potential impact on individual resources, the environmental reviewer makes conclusions on whether any (1) extraordinary circumstances are present in the proposed modification: (2) whether the modification outside the original area analyzed in the EA; or (3) whether the proposed modification significantly alters the projects cumulative impacts analysis. This decision is communicated to the together with any other environmental requirements to the recipient. Any additional environmental analysis or documentation that is required is submitted to NTIA for final review and approval.

Potential Documentation Requirements

A proposed project modification may or may not trigger a requirement for a supplemental environmental analysis and documentation. Supplemental documentation may be required when a propose project modification results in substantial changes to the proposed action that are relevant to or differ from the original environmental analysis; or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. Below are list of potential documentation requirements:

1. Memo to the File: When a determination is made that the change is non-substantive and no additional consultation/discussion is necessary, a memo to the file will be drafted by

the EHP Team and sent to the FPO reflecting the determination and providing environmental approval of the proposed modification.

2. Memo to the File Including (one or more) Consultations: When a determination is made that the change is not substantive, but a potential impact or effect on specific EHP resources is likely, a memo to the file will be drafted that will include the documentation from additional consultations with relevant state or federal agencies.
3. Supplemental EA or New FONSI Required: Used when a determination is made that the change is substantive and a supplemental analysis to the EA and/or a new decision document (FONSI) is required; and additional NHPA consultation/discussion also is required.
4. New EA or EIS: Used when a determination is made that the proposed modifications are so substantively different from the project originally reviewed and approved as to fundamentally change the nature of the project rendering the original EA invalid or an assessment that the new impacts are "significant" and would require an EIS.

Once a recipient has submitted the EHP pre-screening review documentation and any required supplemental documentation and NTIA has reviewed and determined that the supplemental environmental analysis and documentation sufficiently support the conclusions in the EA and FONSI, it will adopt the documents as part of the administrative record and approve the modifications.

Improper Segmentation Conclusion

The *BTOP Environmental Project Modification Review Process* is a great example of an agency using an implementation tool that goes beyond the traditional "predict-mitigate-implement" model and incorporates the more encompassing approach of "predict-mitigate-implement-monitor-adapt" adaptive management model.[35] This process has allowed NTIA to ensure that BTOP projects meet the purpose of their funding while still remaining compliant with grant award terms and conditions, including NEPA. Specifically, it has allowed BTOP projects to avoid improper segmentation by confirming that each project continues to have an "independent utility" and "logical termini" while still providing the flexibility to consider alternative project implementation methods and meet the objective of their federal funding.

Cumulative Effects

CEQ regulations, as part of an environmental analysis, require federal agencies to conduct a NEPA analysis of the direct, indirect, or cumulative impacts or effect of a major federal action. A "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.[36] The scope of this review includes evaluating both federal and non-federal agencies undertakings to determine whether an individually minor impact of a single project could, when combined with other activities, result in a significant impact.[37] The cumulative impact could result from a "direct effect" [38]which occurs at the same place or time as the implementation of a proposed action. These effects are those that are typically easily identified in a NEPA analysis-whether in an EIS or EA. Alternatively, and more likely in evaluating cumulative impacts, the proposed action could result in a "indirect effect"[39] which are caused by the action but occur later or are farther removed in distance from the proposed action, but still reasonably foreseeable. Examples include growth inducing effects related to changes in land use, population density or growth rate, and related effects on natural systems such as air, water, and ecosystems.[40]

The scope of a cumulative effect analysis in an EA should included (1) past and present actions without regard to whether they themselves triggered NEPA responsibilities and (2) future actions that are reasonably foreseeable.[41] Because the CEQ regulations do not explicitly define the term, the determination of whether and when a future action becomes "reasonably foreseeable" and should be accounted for in a NEPA analysis has been the topic of much discussion and debate in the NEPA community. Recently, courts have reinforced the notion that a "future action" becomes "reasonably foreseeable" once it is "proposed" ..... until then it is "speculative" and need not be accounted for in the cumulative impacts analysis in an EA or EIS.[42] A "proposed action" "exists at that stage in the development of an action when an agency subject to [NEPA] has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluated."[43] Therefore a reasonably foreseeable analysis should be focused on whether (1) the proposed actions is likely to occur, rather than those that are merely possible and (2) whether the effect can be meaningfully evaluated. Although this still leaves discretion for agencies to determine whether a proposed action should be considered in a NEPA analysis, courts have interpreted this

to mean that the agency "need not speculate about all conceivable impacts" but must considered all impacts that a person of ordinary prudence would take into account in making a decision of whether the proposed action is sufficiently likely to occur[44] In making these evaluations agencies must make "good faith" effort in determining whether a proposed action should be included in a cumulative impact analysis.[45] This is further explained in the example below:

> "If there is total uncertainty about the identity of future land owners or the nature of future land uses, then of course, the agency is not required to engage in speculation or contemplation about their future plans. But, in the ordinary course of business, people do make judgments based upon reasonably foreseeable occurrences. It will often be possible to consider the likely purchasers and the development trends in that area or similar areas in recent years; or the likelihood that the land will be used for an energy project, shopping center, subdivision, farm or factory. The agency has the responsibility to make an informed judgment, and to estimate future impacts on that basis, especially if trends are ascertainable or potential purchasers have made themselves known. The agency cannot ignore these uncertain, but probable, effects of its decisions."[46]

Simply put, reasonably foreseeable events, although still uncertain, must be probable. This means that those effects that are considered possible, but not probable, may be excluded from NEPA analysis. Thus, there is an expectation that a "good faith" analysis includes making well informed judgments concerning the probability of future impacts, rather than those just based on speculation.[47]

BTOP Cumulative Effects Analysis

As part its environmental analysis, all BTOP EAs were required to analyze direct, indirect, and cumulative impacts of a project on the environment. NTIA used the analysis in the EA to take a "hard look"[48] at the potential environmental impacts that would result from the implementation of a project both now and in the future. The construction of BTOP funded networks has resulted in many private and government entities expressing interest in connecting directly into the network. As one of the primary purposes of the BTOP is to expand broadband infrastructure and improve interconnectivity of a broadband nationwide network, it was

anticipated that outside entities would, at some point, attempt to connect into BTOP funded backbone projects. However, the majority of these proposed network connections have not been individually included as part cumulative impact analysis of the EA. Thus, a policy question as to whether each specific connection now being proposed was reasonable foreseeable at the time the environmental analysis was completed and should have been individually accounted for in a cumulative impact analysis.

NTIA Scope of Review

Although each BTOP EA was project-specific, there were standard areas of analysis and content that enabled NTIA to ensure that the appropriate resource areas have been analyzed and that the project will be in compliance with applicable Federal environmental and historic preservation laws. This included the inclusions and analysis of the (1) proposed actions and alternatives for project implementation; (2) description of effected environmental resources area; (3) and analysis of environmental impacts in those project areas.[49]

In addition to the discussion of resource areas, NTIA required reasonable foreseeable cumulative impacts be identified and analyzed as part of the EA. NTIA required that the cumulative impacts analysis take into consideration any proposed activities that may be additive or that interact with existing conditions or planned activities not specifically related to the projects.[50] This analysis was limited to proposed actions likely to occur, rather than those that are merely possible and required analysis of actions that could be meaningfully evaluated or that would result in a significant impact in the area of the project.

A few examples of the type of activities that would, if applicable, be analyzed in this section include, but are not limited to:

- Working along active roadways where other road construction activities are planned.
- Working in the vicinity of streams at times when unrelated work near the same streams might be expected.
- Building an access road that will encourage access that was not previously available.
- Providing broadband access in an area that will contribute to growth.[51]

Additionally, NTIA explained this analysis requires contacting state/municipal planning and permitting entities to understand what other activities might occur at the time of the project that could result in cumulative effects.[52]

NTIA Cumulative Impact Analysis

Typically, BTOP cumulative effects analysis followed the pattern of (1) identifying the cumulative effects issues associated with the proposed action; (2) establishing the geographic scope for the analysis; (3) establishing the time frame for the analysis; (4) identifying and analyzing other actions affecting the resources, ecosystems, and human communities of concern;[53] and (5) determining the significance of the environmental consequences of the effect.

Identifying Significant Effect Associated the Proposed Action

NTIA, as part of the grant scoping process, identified that the proposed action of deploying of fiber optic cable or the constructing communications towers could potentially impact a variety of resources. NTIA identified project implementation activities including the deployment of fiber underground and the construction of towers could potentially have a significant effect especially in certain resource areas. These areas included water, biological, and historical and cultural resources. NTIA understood that the significance of potential impact would require a case-by-case review for each project because projects would be occurring throughout the country in areas with diverse ecosystems.

Establishing the Geographic Scope

NTIA conducted a project specific analysis for activities occurring in and directly affected by project implementation activities. However in determining the geographic boundaries for cumulative impacts, NTIA used a method similar to project impact zone analysis that took into account resources with the furthest potential direct impact and used the largest of these areas to determine the geographic boundaries for the cumulative effect analysis.

Establishing a Time Frame for Analysis

The timeframe for potential significant impacts of BTOP projects was determined to be the length of the grant agreement. In most cases, this resulted in a projects environmental analysis running for a three-year period, as described in most the grant agreements. This includes the timeframe for analyzing cumulative effects. However, the cumulative effects analysis needed only to account for outside activities, including potential interconnections that were probable, not merely possible, during the three-year period. NTIA considered probable interconnections those that had matured to a point that its proponents were at a decision making

point and had taken specific action relating to a proposed interconnection prior to the final environmental review and issuance of the FONSI. This meant that, unless specific plans to interconnect with BTOP funded broadband networks were proposed and identified during the final environmental analysis, then they were considered too speculative to be meaningfully evaluated or required to be considered in the cumulative impacts analysis.

Identifying and Analyzing Other Action Affecting Resources

NTIA and BTOP grant recipients coordinated with relevant federal, state, and local agencies to identify and analyze other proposed actions that may also be affecting resources. This outreach, other than just aiding NTIA assessing potential cumulative impacts, often resulted in NTIA being able to mitigate additional impacts that might be associated with a BTOP project by coordinating project implementation efforts. For example, some BTOP projects were able to coordinate build schedules with public utilities providers to install fiber along project paths to avoid having ground disturbing activities in the same area but at different times.

Determining Environmental Consequences of the Effect

NTIA, as part of its environmental analysis of BTOP projects, would identify the cause and effect relationship between the human activities and resources, affected eco-systems, and human communities to make a final determination of the projects cumulative effects. In cases where significant effects were identified, NTIA would ensure that mitigation requirements identified and communicated to grant recipients would be implemented and would not have significant environmental impact. These mitigation measures included alternating project routes, changing construction methods, or implementing best management practices that would minimize or avoid potential impacts. In addition, NTIA continues to monitor BTOP projects to substantiate that these measures are being implemented as part of project construction.

Cumulative Effects Conclusion

A cumulative impact analysis requires that a proposed action be likely to occur and that agencies must make good faith effort in determining what actions should be considered in a cumulative effects analysis. The determination that potential interconnection into BTOP funded networks must have matured into a proposal that had matured to a point it was probable and not merely speculative, was based on sound reasoning that would likely meet the threshold of what a reasonable person determine would be necessary to include in a cumulative impacts analysis.

[1] American Recovery and Reinvestment Act of 2009, Public Law 111–5, 123 Stat. 115 (2009) (Recovery Act).

[2] Round One Notice of Funds Availability, 74 Fed. Reg .130 (9 July 2009); Round Two Notice of Funds Availability, 74 Fed. Reg. 14 (22 January 2010).

[3] *Id.*

[4] *Id.*

[5] American Recovery and Reinvestment Act of 2009, Public Law 111–5, 123 Stat. 115 (2009) (Recovery Act).

[6] *Id.*

[7] Round One Notice of Funds Availability, 74 Fed. Reg.130 (9 July 2009); Round Two Notice of Funds Availability, 74 Fed. Reg. 14 (22 January 2010).

[8] Round One Notice of Funds Availability, 74 Fed. Reg. 130 (9 July 2009); Round Two Notice of Funds Availability, 74 Fed. Reg. 14 (22 January 2010).

[9] Round One Notice of Funds Availability, 74 Fed. Reg.130 (9 July 2009); Round Two Notice of Funds Availability, 74 Fed. Reg. 14 (22 January 2010).

[10] The establishment of BTOP categorical exclusions (CEs) occurred prior to the release by CEQ's guidance entitled "Establishing, Applying, and Revising Categorical Exclusions under the National Environmental Policy Act." However, after review of this guidance, NTIA process for establishing CEs for BTOP followed the guidance's core principles including consulting with CEQ, seeking public involvement, publishes draft and final versions and in the Federal Register, and documenting the use of CEs for projects.

[11] 74 Fed. Reg. 196 (Oct. 13, 2009) *available at* *http://www2.ntia.doc.gov/files/BTOP_NEPA_BTOPexclusions_091013.pdf*.

[12] See *Applicant Guidance for Preparing the Environmental Questionnaire and U.S. Department of Commerce Environmental Checklist of the BTOP and BIP Program* available at http://www2.ntia.doc.gov/files/BTOP_NEPA_NHPA_Guidance_Round1_100425.pdf

[13] 42 U.S.C.S. 4332

[14] *Id.*

[15] *See* 42 USC 4343-44

[16] *See* 40 C.F.R. Parts 1500 to 1508.

[17] 40 C.F.R. § 1508.18.

[18] *Id.*

[19] *Id.*

[20] *Bark Creek Ass'n. v. Federal Highway Admin.*, 950 F.2d 1129 (5th Cir, 1992).

[21] *Natural Resources Defense Council, Inc. v. U.S. Nuclear Reg. Comm'n.*, 196 U.S. App. D.C. 354, 606 F.2d 1261, 1269 (D.C. Cir. 1979).

[22] *West Chicago, Ill. v. U.S. Nuclear Reg.y Comm'n.*, 701 F.2d at 650 (7th Cir. 1983).

[23] *Bark Creek Ass'n,* 950 F.2d 1129.

[24] *O'Reilly v. U.S. Army Corp. Engineers,* 950 F.2d 1129 (5th Cir. 2007)

[25] *See Taxpayers Watchdog, Inc. v. Stanley*, 819 F.2d 294 (D.C. Cir. 1987).

[26] *Id.*

[27] *Piedmont Heights Civic Club, Inc. v. Moreland*, 637 F.2d 430 (5th Cir. 1981); *Swain v. Brinegar*, 542 F.2d 364 (7th Cir. 1976).

[28] U.S. Dept. of Trans. Federal Highway Admin., *NEPA and Transportation Decisions*, available at http://environment.fhwa.dot.gov/projdev/tdmtermini.asp.

[29] See 40 C.F.R. 1508.25 (a) (Mentioning the concept of "unrelated single actions.")

[30] *Macht v. Skinner, 715* F. Supp. 1131, 1135 (D.D.C.1989).

[31] See *Association Concerned About Tomorrow, Inc. v. Dole*, 610 F. Supp. 1101, 1108 (N.D.Tex.1985).

[32] *Piedmont Heights Civic Club, Inc. v. Moreland*, 637 F.2d 430 (5th Cir. 1981); *Swain v. Brinegar*, 542 F.2d 364 (7th Cir. 1976).

[33] 40 C.F.R. § 1508.25.

[34] NTIA provide this guidance documentation directly to recipients. As of the date of this paper, it has not been posted to any public website.

[35] The NEPA Task Force Report to the Council on Environmental Quality (Chapter 4) Adaptive management and monitoring pg. 44).

[36] 40 C.F.R. § 1508.7.

[37] *Id.*

[38] 40 C.F.R. 1508.8(a)

[39] 40 C.F.R. 1508.8(b)

[40] Randall Gary, Deputy Chief, Natural Resources Section, Environmental and Natural Resources Division, U.S. Department of Justice, *Cumulative Effects Analysis.*

[41] *Fritiofson v. Alexander*, 772 F.2d 1225 (5th Cir. 1985).

[42] *Wilderness Workshop v. U.S. Bureau of Land Management*, 531 F.3d 1220, 1229 (10th Cir. 2008).

[43] 40 C.F.R. § 1508.23.

[44] *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992).

[45] 46 Fed. Reg. 18026 (March 23, 1981) *Questions and Answers About the NEPA Regulations*.

[46] *Id*.

[47] *Id*.

[48] See *Natural Resources Defense Council v. Morton*, 458 F.2d 827, 838 (D.C. Cir., 1972).

[49] BTOP EA Guidance *available at* http://www2.ntia.doc.gov/compliance.

[50] *Id*.

[51] *Id*.

[52] *Id*.

[53] Considering Cumulative Effects (CEQ) *available at* http://ceq.hss.doe.gov/nepa/ccenepa/sec2.pdf.