

Federal Environmental Impact Statements: Overly Inflated Needs Result in Needless Environmental Harm

Gordon Steinhoff

Utah State University, USA

.....
According to federal regulations, an Environmental Impact Statement (EIS) must include a statement of the purpose of, and need for, the proposed action. Unfortunately, the regulations do not specify how to determine the need. Typically, the declared need for a proposed action includes items that are not genuine needs. They are necessary conditions for achieving goals that are merely desired. The result of such overly inflated needs is, literally, needless environmental harm. The author presents criteria for identifying needs that have been developed by philosophers David Braybrooke and Garrett Thomson. These criteria are useful for gauging how far federal agencies are from a defensible conception of need. The author develops a principle that federal agencies should follow as they formulate the need for a proposed action in an EIS. If adopted, this principle would help eliminate overly inflated needs for proposed actions, leading to more environmentally sensitive decisions.

According to the National Environmental Policy Act (NEPA), federal actions that may significantly harm the environment must be evaluated in an Environmental Impact Statement. Federal regulations implementing NEPA specify the required structure of these documents. An EIS must describe the proposed action. It must compare the expected environmental impacts of the proposed action with those of reasonable alternatives. Also, an EIS must include a statement of the purpose of, and need for, the proposed action (Council on Environmental Quality, 1987, sections 1502.10-1502.16).

Unfortunately, the regulations do not specify how to determine the need for a proposed action. Typically, the declared need for a proposed action includes items that are not genuine needs. They are necessary conditions for achieving goals that are merely desired. The necessary conditions are missing at the time the action is planned. These items are “needs” only in the sense that they are missing and are *needed* to achieve the desired goals. For example, the declared need for an airport expansion project may include economic development of the city in which the airport is located.¹ The economic development is not a genuine need. It is a necessary condition, missing at the time the action is planned, for achieving the desired goal of economic prosperity. Economic prosperity is merely desired; it is itself not a genuine need. That the declared need for a proposed action includes such necessary conditions is an extremely important problem. The combined “purpose and need” determines which alternatives must be evaluated in an

EIS. According to federal agencies and the courts, there is no requirement to evaluate an alternative that does not meet the declared purpose and need.² The result of federal agencies inflating the need for a proposed action by including within it such necessary conditions is that alternatives that would provide genuine needs with little environmental impact are not evaluated and have no chance of being selected. They are automatically ruled out. Agencies typically select the proposed action over the alternatives that *are* evaluated based on how much better the proposed action meets the purpose and need. Far too often the environment is needlessly harmed.

In this paper, the author discusses two EISs that illustrate this practice. One is an EIS recently issued by the Federal Highway Administration concerning a controversial bridge project; the other is an EIS recently issued by the U.S. Forest Service concerning a controversial timber sale. In both documents, the declared need for the proposed action consists of items that are not genuine needs. They are necessary conditions for achieving goals that are merely desired, necessary conditions that are currently missing. In each document, the agency evaluates less-harmful alternatives but rejects them using the overly inflated need. The author presents criteria for identifying needs that have been developed by philosophers David Braybrooke and Garrett Thomson. These criteria are useful for gauging how far the above agencies are from a defensible conception of need. Following ideas from Braybrooke and Thomson, the author develops a principle that federal agencies should follow as they formulate the need for a proposed action in an EIS. If adopted, this principle would help eliminate overly inflated needs for proposed actions, leading to more environmentally sensitive decisions. It would allow agencies and citizens to share more precise language for thinking and communicating about needs, which would enhance the ability of citizens to influence agency decision-making.

In one of the few academic studies that have been done of purpose and need in EISs, legal scholar Owen Schmidt (1988) recommends that agencies carefully distinguish the need for a proposed action from the purpose of the action. The need for a proposed action should include only genuine needs, he writes. Items that are not really needed should not be included within the need, but may be placed within the purpose. The purpose should include providing the needs, and it may include pursuing other, desired goals. Schmidt recommends that agencies determine which alternatives to evaluate using the need for the proposed action, not the purpose. He believes that only genuine needs should dictate the alternative courses of action an agency considers. Schmidt's recommendations are helpful. Unfortunately, he adopts a definition according to which "need" includes anything "requisite, desirable, or useful" (p. 372). This is far too broad. Schmidt recommends that only genuine needs be placed within the need for a proposed action, but

by his understanding of “need” virtually anything can count as a genuine need. This leaves the selection of needs purely to agency discretion.

In a recently released Final EIS (FEIS), the Federal Highway Administration and the Alaska Department of Transportation (FHWA & ADOT, 2004) have proposed to build a bridge between Revillagigedo Island and Gravina Island in the tip of southeastern Alaska. The city of Ketchikan is located on Revillagigedo Island, as is the small town of Saxman. There are no cities or towns on Gravina Island. The island is home to Ketchikan International Airport, located just across Tongass Narrows from Ketchikan. Gravina Island is mostly undeveloped and heavily forested. A ferry service links the city and the airport. The ferry accommodates both foot passengers and vehicles. The agencies propose shutting down the ferry service once the bridge is completed.

The proposed bridge is highly controversial. One issue of concern is safety. Tongass Narrows is narrow (1/4 to 1 mile wide) and crowded during summer days. Cruise ships, fishing boats, barges, tugboats, and floatplanes heavily use the Narrows. There are estimated 500-floatplane trips daily through the Narrows.³ High mountains on either side restrict floatplane traffic to the Narrows. Critics have questioned the wisdom of placing a bridge across such a narrow and busy channel.⁴ Another difficulty is the estimated cost: \$315 million. The watchdog organization, Taxpayers for Common Sense (2005), reports that the cost works out to be approximately \$24,000 per resident. This organization has bestowed upon the project (a “bridge to nowhere”) one of its Golden Fleece Awards.

According to the FEIS, the need for the project includes i) “more reliable, efficient, convenient, and cost-effective access” to developable lands on Gravina Island, ii) more convenient and reliable access to the airport, and iii) long-term economic development on Gravina Island (FHWA & ADOT, 2004, p. 1-2). The agencies evaluate a good number of alternatives, including several locations and designs for the bridge. Several of the evaluated alternatives call for improving the ferry service between Ketchikan and the airport by building new terminals and adding a second ferry. In one alternative, the new terminals would be located adjacent to the present terminals. The cost and environmental impacts of improving the ferry service would be significantly less than the cost and impacts of building a bridge. The agencies have acknowledged that an improved ferry service would provide the above need. It would provide more convenient and reliable access to the airport and developable lands on Gravina Island. It could be made cost-effective. The levels of convenience and reliability of access sought by the agencies, however, and the desired levels of economic development, can be provided only by a bridge. The agencies have selected

the proposed bridge as the “preferred alternative” on the grounds that it provides the above need better than the alternatives.⁵

The expected environmental harm includes a decline in the availability of subsistence resources on Gravina Island. The majority of the residents of Saxman and Metlakatla (on nearby Annette Island) are Alaska Native. They rely upon subsistence activities, including hunting, fishing, and berry gathering. Subsistence resources such as deer, salmon, and berries “provide needed food.” They “enable residents to maintain a rich and varied diet” (State of Alaska Department of Transportation, 2001, p. 9).⁶ Gravina Island is an important source of subsistence resources for these communities (FHWA & ADOT, 2004, p. 3-15). A bridge between Ketchikan and Gravina Island is expected to significantly increase the number of visitors to the island. In a recent Record of Decision, the U.S. Forest Service (2004a) announced its decision to build 22 miles of new roads into Gravina Island to make tracts of forestland available for a timber sale. The new roads will greatly enhance access into the island. The proposed bridge together with the new roads will substantially increase competition for subsistence resources on the island. In their discussion of the cumulative impacts of the proposed bridge and new roads, the highway agencies acknowledge that the deer population on the island could be lost. The agencies state: “increased competition for subsistence hunting of deer could decrease the deer population to a level that is not sustainable” (FHWA & ADOT, 2004, p. 4-183).⁷ An improved ferry service is not expected to significantly increase competition for subsistence resources (p. 4-184).

David Braybrooke (1987) has developed a criterion for identifying needs. According to Braybrooke, a need is something that a person requires in order to carry out four basic social roles: parent, householder, worker, and citizen. Each need must be obtained at a minimum level. The minimum level may vary from person to person, and for a given person, from one stage of life to another. Braybrooke often expresses his criterion in terms of derangement. Something is a “matter of need,” according to Braybrooke, if people would suffer from a derangement of function in the four basic social roles if they were unable to obtain the thing in question at the appropriate minimum level (pp. 49-50).

Garrett Thomson (1987) presents a criterion that does not appeal to social roles, and it does not insist on derangement. He expresses his criterion in this way: A person has a need for X if he must be seriously harmed so long as he lacks X (p. 90). Thomson emphasizes the causal connection that exists between the lack of something needed and serious harm. The underlying causal connection leads him to express his criterion in terms of necessity (“he *must* be seriously harmed ...”). The “serious harm” Thomson has in

mind is death or harm that is nearly as serious as death. He writes that "on pain of death or some other form of serious harm, we have no alternative but to obtain what we need" (p. 27). Thomson does not accept as serious harm the psychological suffering that may be caused by the failure to obtain what one merely desires. He acknowledges that the notion of "serious harm" may be weakened, however, so it includes more than death and other really serious forms of harm. This will expand the list of needs. The boundary between needs and "unneeded benefits" is vague, he admits. "This weakening is possible," he writes, "because the notion of serious harm is vague" (p. 92).

The criterion adopted in this paper is as follows. It includes ideas from Braybrooke and Thomson.

X is a matter of need if people would suffer serious harm if X were not provided at the appropriate minimum level.

The author has expressed the criterion in terms of the failure to provide X, rather than the failure to obtain or acquire X. Within EISs, federal agencies are concerned with provision. The agencies typically write of "meeting needs," which indicates their concern with providing items they have identified as needed. Needs should be identifiable at this level of concern, provision rather than acquisition, by considering the failure to provide. The author has followed Thomson in this way: The failure to provide X (at the appropriate minimum level) results in serious harm rather than derangement. "Derangement" has the sense of total incapacitation, which seems to overly restrict what can count as a need. "Serious harm" is vague, but it is still useful. There are limits to what can count as "serious harm." Unfortunately, the criterion allows the identification of only human needs. The serious harm if X were not provided (at the appropriate minimum level) is limited to serious harm to people. The criterion does not allow identification of wildlife needs, forest needs, ecosystem needs, etc. The criterion is still useful, however. It allows an evaluation of the project "need" in each EIS discussed in this paper.⁸

In the Gravina Access FEIS, the Federal Highway Administration and the Alaska Department of Transportation (FHWA & ADOT, 2004) offer arguments for the declared need for the project. Several arguments are offered for this aspect of the need: more convenient and reliable access to the airport. In one argument, the agencies note that the average waiting time for the ferry during the winter months is "9 minutes for foot passengers and 12 minutes for vehicle passengers" (p. 1-4). During the summer tourist season, when planeloads of passengers arrive, the ferry leaving the airport is sometimes full and passengers must wait 15 minutes for the next ferry. This adds "even

more time to their trip” (p. 1-4). As these agencies see it, even relatively minimal delays of 9, 12, and 15 minutes are objectionable. Airline passengers are unacceptably inconvenienced. These delays contribute to a “decrease in the quality of travel into and out of Ketchikan” (p. 1-4). Other factors contribute to a decreased quality of travel. The agencies report that ferry delays cause some passengers to miss their flights. This “frustrates passengers.” No information is provided on the number of passengers who miss their flights due to ferry delays. There is no discussion of whether this problem could be minimized by persuading passengers to allow more time for their trip to the airport. According to the agencies, just the effort to coordinate flight schedules with the ferry schedule “adds inconvenience and stress to travel” (p. 1-4).

In the above argument, the agencies seek to establish that convenient and reliable access to the airport is missing in present circumstances. This is the point of the discussion of travel delays, missed flights, and the required effort to coordinate flight and ferry schedules. The agencies do not make clear how the lack of convenient and reliable access to the airport justifies including under the need for the project more convenient and reliable access to the airport. What justifies elevating this item to the level of need? The answer is hinted at when the agencies assert that the travel delays, missed flights, etc. contribute to a decreased quality of travel into and out of Ketchikan. The argument is that more convenient and reliable access to the airport is a necessary condition, missing in present circumstances, for achieving the goal of high-quality travel into and out of Ketchikan. More convenient and reliable access to the airport rises to the level of need since this item is missing and is *needed* to achieve the desired goal. The agencies simply assume that high-quality travel into and out of Ketchikan is desired; there is no discussion of this. In light of the above criterion, more convenient and reliable access to the airport is not a genuine need. Apparently, no one will suffer serious harm (much less derangement) if more convenient and reliable access to the airport is not provided and high-quality travel into and out of Ketchikan is not achieved. In their argument, the agencies do not attempt to establish that serious harm will occur if this aspect of the need is not provided and the goal is not achieved. This aspect of the need is only a necessary condition, missing in present circumstances, for achieving a goal that is merely desired.

In a separate argument, the highway agencies note that the ferry offers limited capacity, limited operating hours (16 hours per day in summer), and restrictions on the type and weight of cargo. Restricted in these ways, the ferry “imposes limitations on the services that airport tenants can provide” (FHWA & ADOT, 2004, p. 1-5). This reduces the economic potential of the

airport . The agencies present the argument in this way:

In many cities, airports become generators of economic development in their own right. Air carriers, rental car operators, and other airport services such as airplane repair, charter operators, hotels, restaurants, couriers, and light manufacturers often want to locate their business next to an airport. However, operating these services at Ketchikan International Airport costs more because of the inconvenience, additional handling of materials, and extra time to work around the limitations of the ferry schedules. These costs and difficulties reduce the economic potential of the Ketchikan International Airport. There is a considerable disincentive to locating business at the airport in terms of cost and inconvenience to both employees and customers. Because of the direct cost of access (the ferry fare is \$6 per car and \$4 per person) and the more difficult scheduling (to coordinate the timing of the trip with the ferry schedule), only essential services are located on airport property. This, in turn, reduces airport lease revenues, and makes the airport more expensive for the Borough to operate... (pp. 1-4 to 1-5).

The reduced economic potential of the airport is supposed to justify including under the need for the project more convenient and reliable access to the airport. The agencies' argument can be rendered as follows: The ferry service offers limited capacity, limited operating hours, etc. Convenient and reliable access to the airport across the Narrows is missing in present circumstances, yet this is a necessary condition for achieving a high level of economic development at the airport (with car rental agencies, plane repair shops, restaurants, hotels, gift shops, etc.). Apparently, no one will suffer serious harm if access to the airport is not improved and a high level of economic development at the airport is not achieved. The agencies do not claim that serious harm will occur if this aspect of the need is not provided and the goal is not achieved. There is no claim that the cost of running the airport is excessive and harms Borough residents. Again, more convenient and reliable access to the airport is only a necessary condition, missing in present circumstances, for achieving a goal that is merely desired.

With respect to the other items included under the need for the project—improved access to developable lands on Gravina Island, and long-term economic development of these lands—the argument is purely economic. The Ketchikan Gateway Borough “has aggressively planned for economic development” (FHWA & ADOT, 2004, p. 1-7). The Borough has identified development on Gravina Island as the “primary mechanism” for accomplishing the goal of expanding and diversifying the local economy. According to the FEIS, “The lack of access to developable land on Gravina Island is a problem that limits development of the economy in the Borough” (p. 1-7). The argument is that improved access to developable lands on

Gravina Island, and the long-term development of these lands, are necessary conditions for the desired expansion of the local economy. There is no attempt to link these items to serious harm if they are not provided and the local economy does not expand as desired. They are only necessary conditions, missing in present circumstances, for achieving a goal that is merely desired.

Federal agencies use the declared purpose and need in an EIS to evaluate and typically reject alternatives to the proposed action. Typically, however, the need for the action includes necessary conditions, missing at the time the action is planned, for achieving desired goals. Neither the necessary conditions nor the desired goals are genuine needs. No one will suffer serious harm if the necessary conditions are not provided and the desired goals are not achieved. To the extent that a need for an action is inflated with such necessary conditions, the result is environmental harm that is, literally, needless.

The Gravina Access FEIS (FHWA & ADOT, 2004) presents several more arguments to support the "need" for the project. One of these is a safety argument. The argument should rest on a serious-harm claim, but there is no indication the agencies add such a claim. The agencies argue in this way: With the current ferry service, the Ketchikan Fire Department has limited ability to respond to fires on Gravina Island. Also, medical emergency personnel have limited ability to transport patients between the airport and the hospital in Ketchikan. Problems include the ferry's limited operating hours, and emergency equipment (fire trucks and ambulances) cannot be loaded onto the ferry during extreme low tides and extreme high tides due to the sharp angles between the loading ramp and the ferry (p. 1-6). According to the agencies, "Transporting emergency personnel and equipment between the airport and Ketchikan is inconvenient and limits the ability of emergency personnel to respond to emergencies quickly and efficiently" (p. 1-5). This argument is supposed to support including under the need for the project more convenient and reliable access to the airport. The agencies do not go on to add the claim that people will suffer serious harm if more convenient and reliable access to the airport is not provided. There is no mention of serious harm or dire consequences. The agencies do not provide supporting data for such a strong claim. No information is presented showing that in the past people have suffered serious harm due to poor access during emergencies. One problem with this argument is simply that it is incomplete. The agencies should add and justify the claim that people will suffer serious harm if more convenient and reliable access to the airport is not provided. For all we know from this FEIS, the present emergency-response system functions adequately.

Another problem is that the above serious-harm claim is likely false. The agencies propose to provide more convenient and reliable access to the airport for the general public, not just for emergency personnel. The declared need for this project includes more convenient and reliable access to the airport, with the understanding that the improved access will be for the general public. But if more convenient and reliable access to the airport for the general public were not provided, either by a new bridge or by an improved ferry, it is highly likely that special measures would be taken to improve emergency services if there is real need for improvement. Perhaps helicopter transport could be provided between the airport and Ketchikan hospital for emergency patients. Perhaps a new fire station could be built on Gravina Island. The FEIS does not discuss such alternative measures. In its comments on the project, the Environmental Protection Agency suggests options such as the use of special water taxis for transport of emergency patients when the ferry is not in operation (FHWA & ADOT, 2004, Appendix R2). Since alternative measures would likely be put in place, the safety argument fails to show a need for this public-access project even if the serious-harm claim were added to the argument.

Apparently, there is no genuine need for this project. It is motivated by desires for high-quality transportation and economic prosperity. The project will provide, in Thomson's (1987) words, "unneeded benefits" (p. 93-94).

The Gravina Access FEIS (FHWA & ADOT, 2004) illustrates another important problem. Federal agencies do not specify, for a declared need for an action, the minimum levels required to provide the need. Agencies attempt to provide the need at levels that are not required. In the Gravina Access FEIS, the declared "need" is very general: more reliable, efficient, convenient, and cost-effective access to developable lands on Gravina Island, long-term economic development on the island, more convenient and reliable access to the airport. The agencies do not specify the minimum levels of reliability, efficiency, convenience, cost effectiveness, and economic development that must be provided. For all we know from this FEIS, the need for this project could be provided satisfactorily by improving the ferry service, with less cost and environmental impact. One indicator of convenience of access is travel time (p. 3-13). With the existing ferry service, it takes 27 minutes to travel from downtown Ketchikan to the airport. The improved-ferry alternative that calls for new terminals to be built adjacent to the present terminals would cut the time for the trip to 25 minutes. The proposed bridge would cut the travel time to 13 minutes (p. Sum-13). The difference between the alternatives is only 12 minutes, yet the agency has selected the bridge over the improved ferry on the grounds that the bridge best provides the need. There is no discussion of why 25 or even 27 minutes for the trip is not sufficiently convenient. The Gravina

Access FEIS includes other examples of this problem: for a declared need for an action, agencies do not indicate the minimum levels required to provide the need. A further problem is illustrated here: the additional improvements provided by the preferred alternative often seem marginal, for example, a time savings of 12 minutes.

To summarize, two main problems have been discussed. First, federal agencies typically inflate the need for a proposed action by including items that are not genuine needs. They are necessary conditions, missing at the time the action is planned, for achieving goals that are merely desired. Failure to provide the necessary conditions and achieve the desired goals will not result in serious harm. Second, agencies do not indicate, for a declared need for an action, the minimum levels required to provide the need.

As mentioned earlier, the U.S. Forest Service (2004a) has announced its decision to build approximately 22 miles of roads on Gravina Island to make tracts of land available for a timber sale. Currently the island is almost roadless and very little logging has been done. The project is described in a recent FEIS (U.S. Forest Service, 2004b). The Purpose and Need chapter of this FEIS includes this statement: "The Gravina Island Timber Sale Project responds to goals and objectives of the Forest Plan, and helps move the project area towards desired future conditions described in that plan" (p. 1-2). This is best interpreted as a statement of the purpose of the project. The purpose is to achieve the goals and objectives of the Forest Plan, and to bring Gravina Island closer to the desired future conditions for this area. The goals and objectives for Tongass National Forest, listed in the Forest Plan, emphasize timber sales, for example: "seek to provide a timber supply sufficient to meet the annual market demand for Tongass National Forest timber" (p. 1-2). The desired future conditions for this area are summarized in several Land Use Descriptions: timber production (understood to mean timber production for logging), scenic viewshed (timber production with a goal of minimizing harm to scenery), old-growth habitat, and mineral production.

The need for the project is, generally, a timber sale on Gravina Island. The Forest Service attempts to show that a timber sale on the island, considered in abstraction from the evaluated alternatives, is a necessary condition for achieving the goals and objectives of the Forest Plan, and for bringing the island closer to the desired future conditions for this area. The Record of Decision (2004a) states: "Timber from this project is needed as a component of the timber sale schedule to provide timber to industry in an even flow over the 10-year planning cycle" (p. R-7).

A timber sale on the island is "needed" to achieve the agency's annual

timber sales goals. The FEIS has not established that a timber sale on the island is a need in accordance with our criterion. No argument is offered to show that anyone will suffer serious harm if trees on the island are not offered for sale, just as no argument is offered to show that anyone will suffer serious harm if the Forest Service does not fully meet its annual timber sales goals. It would be difficult to argue that people will suffer serious harm if the Forest Service does not *fully* meet its sales goal for a given year. With its timber sales, the agency seeks to maintain the timber industry's inventory of uncut-timber-under-contract at a precisely calculated level. The industry's inventory of uncut-timber-under-contract serves several functions, one of which is to protect the industry from possible interruptions in the purchase of new timber. The Forest Service seeks to maintain this inventory at its "optimal" level, which will provide a 2 to 3 year supply of timber (2004a, p. A-7).⁹ Surely, no serious harm will result if this inventory is not maintained at exactly this level. With its timber sales, the Forest Service attempts to satisfy industry desires for a high level of financial security and for growth. It would be equally difficult to argue that serious harm will occur if the other goals for this project are not met, for example, Gravina Island is not brought closer to the desired future conditions for this area. A timber sale on the island is a necessary condition, missing in present circumstances, for achieving goals that are merely desired.

The Forest Service acknowledges that Alaska Natives living in Metlakatla will suffer disproportionate harm from this timber project. The new roads will enhance access into Gravina Island from the northeast, from Ketchikan. Annette Island and Metlakatla lie to the southwest. According to the FEIS, the new roads will place subsistence users from Metlakatla at a competitive disadvantage while they increase competition for subsistence resources (2004b, pp. 3-35 and 3-36).

In spite of this and other difficulties associated with the new roads, the Forest Service has rejected the alternative that calls for only helicopter logging with no new roads. The agency cites low timber yield as one reason for rejecting this alternative (2004a, p. R-16).¹⁰ The Selected Alternative has been selected on the grounds that it best provides needed timber sales from Gravina Island.¹¹

Is the sale of Tongass National Forest timber for harvest a matter of need? Is the above criterion met? Is it the case that people would suffer serious harm if Tongass timber sales were not provided at an appropriate minimum level? The author believes the answer is yes. Lack of employment and opportunities for employment in a person's area of skill and expertise should count as serious harm to that person and his or her family. Lack of employment and opportunities for employment often have consequences

such as inadequate medical and dental care for family members. A case can be made that Tongass timber sales is as much a matter of need for people in the timber industry in southeast Alaska as subsistence resources are for Alaska Natives in Saxman and Metlakatla.

Unfortunately, the Forest Service does not provide an estimate of the minimum amount of timber that must be sold to satisfactorily provide the need. The Gravina Timber Sale FEIS gives some indication that there is a minimum level. It explains that in those years in which Congress does not appropriate the amount of money requested by the Forest Service for support of its proposed timber sale projects—funds provided by Congress pay for necessary structures such as logging roads, log transfer facilities, etc.—the Forest Service uses the funds that *are* appropriated for “higher priority projects.” These are timber sales that are less expensive to initiate since necessary roads, log transfer facilities, and other structures are already in place (2004b, p. A-12). The higher priority projects in Tongass National Forest may represent the minimum level of timber sales that satisfactorily provides the need in a given year. That the Forest Service has adopted this procedure suggests that this is the case. The advantage of indicating a minimum level is that agency decision makers would be better able to balance providing needed timber sales with protecting the environment, including subsistence resources. They would be able to decide that satisfactorily providing the need with less environmental harm outweighs the benefits of selling more timber.

In each example discussed in this paper, a federal agency rejects environmentally less-harmful alternatives on the grounds that they do not meet the need for the project as well as the preferred alternative does. But in each case, the “need” for the project consists exclusively of necessary conditions for achieving goals that are merely desired. In the first EIS, the “need” includes more convenient and reliable access to the airport, a necessary condition for achieving high-quality transportation and economic prosperity. In the second EIS, the “need” is a timber sale on Gravina Island, a necessary condition for meeting the annual timber sales goals and for bringing the island closer to the desired future conditions for the area. Neither EIS establishes that anyone will suffer serious harm if the “need” is not provided and the desired goals are not achieved. This is a typical agency practice. It is fair to say that in EISs federal agencies have abandoned need in favor of desires and the conditions necessary for satisfying them. Much environmental damage is, again, literally needless. Another problem is that, as in the above EISs, federal agencies do not indicate the minimum levels required to satisfactorily provide the declared “need” for an action.

One motivation for presenting the criteria developed by Braybrooke and

Thomson is to show how far federal agencies are from a defensible conception of need. Needs should be distinguished from desires. As a simple proof that the two concepts are different: people often desire what they do not need, and they sometimes need what they do not desire (Thomson, 1987, pp. 98-99).¹² Needs are connected to our well-being in a way that desires are not. It may be too restrictive to tie a need to "derangement of function" if the need is not provided, but it seems intuitively correct to tie a need to serious harm if the need is not provided (at the appropriate minimum level). If something that is merely desired is not provided, a person may be disappointed, frustrated, or sad, but she or he will not suffer truly serious harm (Thomson, p. 90). In their EISs, federal agencies are far from an adequate conception of need.

Following the recommendations offered by Schmidt (1988), in their EISs federal agencies should carefully distinguish the need for a proposed action from the purpose of the action, and include in the need only genuine needs. Schmidt allows the agencies too much discretion in selecting a need. Federal agencies should follow this principle as they prepare EISs:

The statement of the need for a proposed action should include i) an indication of the minimum levels required to satisfactorily meet the need, and ii) a demonstration that serious harm will occur if the need is not met at the indicated minimum levels.

This principle should be included within NEPA regulations. The principle is expressed in terms typically used by agency planners. Agencies seek to "meet needs." "Serious harm" should not be limited to serious harm to people. "Serious harm" may refer to serious harm to wildlife, ecosystems, endangered species, the entire Earth, etc. "Serious harm" is vague, but there is a limit to how far this concept can be stretched. For example, as mentioned earlier, it would be difficult to maintain that people will be seriously harmed if more convenient and reliable access to the Ketchikan Airport is not provided and high-quality transportation into and out of Ketchikan is not achieved. Travel delays of 9, 12, and 15 minutes are relatively minimal. The FEIS claims that some passengers are frustrated as a result of missed flights, but frustration does not constitute serious harm. Similarly, it would be difficult to maintain that people will suffer serious harm if Gravina Island timber is not offered for sale and the Forest Service's timber sales goals are not fully achieved. From Forest Service documents, the agency seeks to provide optimal supply conditions for the timber industry. Apparently, the Forest Service can satisfactorily provide the need with smaller sales.¹³ The above principle should help end the common practice of formulating overly inflated needs.¹⁴

NEPA regulations require that each EIS include a statement of the purpose *and* need for the proposed action. Federal agencies should be held to this requirement. If an agency cannot demonstrate that serious harm will occur if the declared “need” is not met at the indicated minimum levels, the action should not be approved. The benefit of this policy would be, of course, less expense and less environmental harm from federal actions.

With the above principle in place, citizens would share with the agencies more precise language for thinking about needs. Citizens would be able to provide input concerning whether there will be serious harm (to people, wildlife, ecosystems, etc.) if federal action is not taken, and concerning the appropriate minimum levels that must be provided. Citizen input on needs will help reform agency practice.

According to Schmidt (1988), the purpose of a proposed action may go beyond providing genuine needs. An agency may include in the purpose of an action achieving goals that are merely desired. According to Schmidt, for example, the purpose of a Forest Service timber sale project may include meeting the agency’s annual timber sales goals. An agency should determine which alternatives to evaluate using the need for the action, however, not the purpose. These recommendations are helpful, as long as the need for an action is tied to serious harm if the need is not provided at the indicated minimum levels. Following Schmidt’s recommendations, the purpose of the action may be used to evaluate alternatives and select the alternative the agency will pursue. For example, the Forest Service may use the objective of meeting its annual timber sales goals in evaluating alternatives and selecting the alternative it will pursue. Regardless of which alternative is selected, the need for the action would be provided at no lower than the indicated minimum levels. For the sake of enhanced environmental preservation, agency decision makers may elect to abandon some of the desired goals included in the purpose. Decision makers and citizens will understand that these goals are merely desired. This should lead to more environmentally sensitive decisions.

Endnotes

¹ This example is suggested by the airport expansion project at issue in *Citizens Against Burlington v. Busey* (1991).

² See, for example, Federal Highway Administration (1990).

³ From the FEIS: “A typical summer day” in Tongass Narrows includes “173 charter boat transits; 22 small passenger vessels; 4 to 6 large cruise ships with 1 to 2 at anchor; 150 fishing vessels; 3 to 5 barge/tug transits; 30 to

40 kayaks; and an unknown number of recreational and transient boat traffic." This is in addition to the 500 floatplane takeoffs and landings (FHWA & ADOT, 2004, pp. 3-25 and 3-29).

⁴ One commentator on the project wrote: "The weather conditions for flying in southwest Alaska are marginal anyway without adding another obstruction (a bridge)" (State of Alaska Department of Transportation, 2002, p. 3).

⁵ "The ferry alternatives do not achieve the purpose and need objectives of the project to the same level as the bridge alternatives" (FHWA & ADOT, 2004, p. 2-17). Also, "These [ferry] alternatives would not, however, provide the convenience and reliability of access to the airport and other lands on Gravina Island as well as the bridge alternatives would" (p. 2-20). In the Record of Decision for this project, the Federal Highway Administration (2004) has selected the proposed bridge as the alternative it will pursue.

⁶ 97% of the residents of Saxman, and 100% of the residents of Metlakatla, use subsistence resources. See FHWA & ADOT (2004), p. 3-15.

⁷ In the Record of Decision for the project, the Federal Highway Administration (2004) adopts a new approach to this issue. The agency notes that the responsibility for management of wildlife on the island falls to other agencies, and that any hunting restrictions imposed by these agencies to protect the deer will favor subsistence over non-subsistence hunters (Appendix A, pp. 14-15).

⁸ Thomson (1987) recognizes what he calls "purely instrumental needs." These are necessary conditions for achieving ends that are merely desired. He distinguishes "fundamental" needs, those needs identified by his criterion, from purely instrumental needs. Similarly, Braybrooke (1987) distinguishes "basic" needs from "adventitious" needs (p. 32). Both philosophers sharply distinguish needs from desires. It is misleading to extend the "need" designation to necessary conditions for achieving ends that are merely desired. This leads to confusion of needs and desires. Both philosophers attempt to accommodate our ordinary way of thinking about needs. In everyday life, and in government agencies, necessary conditions for achieving desired ends are often labeled "needs."

⁹ The equations for calculating this "optimal" level are found in Morse (1998).

¹⁰ "This alternative did not provide sufficient volume to adequately address the purpose and need" (U.S. Forest Service, 2004a, p. R-16).

¹¹ The Selected Alternative protects subsistence resources to some extent. This alternative requires the closure of about half the new roads after the timber harvest. The closed roads will enhance access into the island by foot, but not by vehicle. The main road into the island will remain open for motorized recreation except during the deer hunting and wolf trapping seasons (U.S. Forest Service, 2004a, pp. R-2 to R-3).

¹² Galtung (1980) writes:

A need should be distinguished from a want, a wish, a desire, a demand. The latter are subjectively felt and articulated: they may express needs, but they also may not; and there may be needs that are not thus expressed. Thus, there is no assumption that people are conscious of their needs... it is well known that we may want, wish, desire, or demand something that is not really needed in the sense of being necessary. Necessary for what? For the person to be a human person ... (p. 59).

¹³ See, for example, Morse (1998). The timber industry has not absorbed the volumes of Tongass timber the Forest Service has offered for sale over the past several years. For example, in 2003 the agency offered for sale 118 million board feet, but sold only 36 million board feet (U.S. Forest Service, 2004b, p. A-8). The industry's need has apparently been met with significantly less timber than the agency has offered. For more information on the Tongass National Forest timber program see Southeast Alaska Conservation Council (2003).

¹⁴ Economists have thoroughly criticized using the concept of need as a tool in setting social policy. Braybrooke (1987) presents an especially good defense of the concept of need. The author's position in this paper is that the concept of need (basic or fundamental need) should be used in federal agency decision-making.

References

Braybrooke, D. (1987). *Meeting needs*. Princeton, NJ: Princeton University Press.

Citizens Against Burlington v. Busey 938 F.2d 190 (D.C. Cir. 1991).

Council on Environmental Quality. (1987). *Regulations for implementing NEPA*. Retrieved April 5, 2006, from http://ceq.eh.doe.gov/nepa/reg/ceq/toc_ceq.htm

Federal Highway Administration. (1990). *The importance of purpose and*

need in environmental documents. Retrieved April 5, 2006, from

<http://www.environment.fhwa.dot.gov/projdev/tdmneed.asp>

Federal Highway Administration. (2004). *Gravina Access Project record of decision*. Retrieved April 5, 2006, from

<http://dot.alaska.gov/stwdplng/projectinfo/ser/Gravina/documents.shtml>

Federal Highway Administration and State of Alaska Department of Transportation and Public Facilities

[FHWA & ADOT]. (2004). *Gravina Access Project final environmental impact statement*. Juneau, AK: State of Alaska Department of Transportation and Public Facilities. Retrieved April 5, 2006, from

<http://dot.alaska.gov/stwdplng/projectinfo/ser/Gravina/documents.shtml>

Galtung, J. (1980). The basic needs approach. In K. Lederer (Ed.), *Human needs* (pp. 55-125). Cambridge, MA: Oelgeschlager, Gunn, & Hain.

Morse, K. (1998). *Evaluating the market demand for Tongass timber*. USDA Forest Service, Region 10. Juneau, AK: USDA Forest Service.

Schmidt, O. (1988). The statement of underlying need defines the range of alternatives in environmental documents. *Environmental Law* 18, 371-381.

Southeast Alaska Conservation Council. (2003). *Taxpayer losses and missed opportunities: How logging and road building in the Tongass National Forest costs taxpayers millions*. Juneau, AK: Southeast Alaska Conservation Council.

State of Alaska Department of Transportation and Public Facilities. (2001). *Gravina Access Project social environment technical memorandum*.

Retrieved April 5, 2006, from

<http://dot.alaska.gov/stwdplng/projectinfo/ser/Gravina/documents.shtml>

State of Alaska Department of Transportation and Public Facilities. (2002). *Gravina Access Project reasonable alternatives public comments summary document*. Juneau, AK. Retrieved April 5, 2006, from

<http://dot.alaska.gov/stwdplng/projectinfo/ser/Gravina/documents.shtml>

Thomson, G. (1987). *Needs*. London: Routledge and Kegan Paul.

Taxpayers for Common Sense. (2005). *The Gravina Access Project: a bridge to nowhere*. Retrieved April 6, 2006, from

<http://www.taxpayer.net/Transportation/gravinabridge.htm>

USDA Forest Service. (2004a). *Gravina Island Timber Sale record of decision*. Ketchikan, AK:

USDA Forest Service.

USDA Forest Service. (2004b). *Gravina Island Timber Sale final environmental impact statement*. Ketchikan, AK: USDA Forest Service.

.....

.....

Gordon Steinhoff <hannibal@cc.usu.edu>, Department of Languages, Philosophy, and Speech Communication, Utah State University, Logan, UT 84322-0720. TEL: 435-797-3688.