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The Steepest Hurdle in Obtaining A Clean Water Act Section 404 Permit: Complying with EPA’s 404(b)(1) Guidelines’ Least Environmentally Damaging Practicable Alternative Requirement*

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I. INTRODUCTION

To construct any project involving the discharge of dredged or fill material into U.S. waters, one must obtain a 404 permit from the United States Army Corps of Engineers (Corps). An applicant for a 404 permit must demonstrate to the Corps that, among other things, the proposed project is the least environmentally damaging practicable alternative (LEDPA) to achieve the project’s purpose. To determine the LEDPA, an applicant conducts a 404(b)(1) Alternatives Analysis. Though the LEDPA determination is only one of many determinations the Corps will make for a project and that the applicant must pass, the LEDPA determination is often the “steepest hurdle” in obtaining a 404 permit.¹ Practitioners should be aware that where a proposed

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project is not the LEDPA, the Corps may not approve the project or grant the applicant a 404 permit. In other words, the LEDPA determination can be fatal to the project.

This article explains how the Corps determines whether an applicant’s project is the LEDPA. Because the LEDPA is one determination among many that the Corps will make in deciding whether a project is in the public interest and complies with the 404(b)(1) Guidelines, this article also explains the context in which the LEDPA review is undertaken. A flow chart of the LEDPA determination process is included as Appendix 1.

II. 404 (B)(1) GUIDELINES COMPLIANCE

Section 404 of the Clean Water Act (CWA) requires a permit for the discharge of “dredged or fill materials” into “waters of the United States.” Therefore, a permit to discharge dredged or fill materials into waters of the U.S. is referred to as a 404 permit. To issue a 404 permit, the Corps must ensure, among other things, that the activity complies with the U.S. Environmental Protection Agency’s (EPA) 404(b)(1) Guidelines, set out in 40 C.F.R. section 230. The purpose of the Guidelines is “to restore guidelines’ requirements, “perhaps none is more strict than the practicable alternatives analysis”).


3. 33 C.F.R. § 325.1(c) (2005). Ideally, an applicant would submit an application to the Corps with a completed 404(b)(1) alternatives analysis. Interview with Ken Bogdan, Attorney, Jones and Stokes, in Sacramento, Cal. (July 15, 2004). However, applicants typically submit the application and then prepare the alternatives analysis. Id. A 404(b)(1) alternatives analysis is not required for a complete application, though it is recommended that the analysis be done early in the review process. Yocom et al., Wetlands Protection Through Impact Avoidance: A Discussion of the 404(b)(1) Alternatives Analysis, 9 Wetlands 283, 295 (1989); Uram, supra note 1, at 59. The Yocom et al. article was written by three EPA employees, discussing their interpretation of the 404(b)(1) Guidelines.

4. Heidi Wendel, Comment, Bersani v. EPA Toward a Plausible Interpretation of the 404(b)(1) Guidelines for Evaluating Permit Applications for Wetland Development, 15 Colum. J. Envtl. L. 99, 102 (1990)(hereafter Wendel); Broadway, supra note 1, at 813. The 404(b)(1) compliance process is not a rigid process; the process is very fact specific and very dependent upon the particular circumstances of the particular case. Interview with Lisa Clay, Corps Counsel, U.S. Army Corps of Engineers, in Sacramento, Cal. (June 30, 2004)(all comments of Ms. Clay reflect her
and maintain the chemical, physical, and biological integrity of waters of the United States through the control of discharges of dredged or fill material." The project applicant is required to prepare a 404(b)(1) analysis to provide the Corps with the necessary information to determine whether the Guidelines have been followed. Such an analysis is required for water and non-water-dependent projects, but certain presumptions will apply to non-water-dependent projects, discussed below. The amount of information necessary to make this determination is commensurate with the level of the project’s impacts—more information is required for large and complex projects.

The 404(b)(1) Guidelines are the substantive criteria the Corps will use in determining a project’s environmental impacts on aquatic resources from discharges of dredged or fill material. The Guidelines are binding regulations, meaning a project that does not comply with these guidelines will be denied a 404 permit. If the project does comply with the Guidelines, a permit will be granted “unless issuance would be contrary to the public interest.” While the Guidelines are binding, they are also inherently flexible, leaving room for judgment in determining compliance on a case-by-case basis.

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7. Uram, supra note 1, at 15.
10. 33 C.F.R. § 320.4(a)(1) (2005); Old Cutler, supra note 9, at 4; Hartz Mountain, supra note 9, at 2; Appropriate Level of Analysis, supra note 8, at 1; Twisted Oaks, supra note 9, at 4; Broadway, supra note 1, at 817.
11. 33 C.F.R. § 323.6(a) (2005).
12. 45 Fed. Reg. 85336 (Dec. 24, 1980); Appropriate Level of Analysis, supra note 8, at 1-2; Uram, supra note 1, at 15; Interview with Lisa Clay, supra note 4; EPA/
The 404(b)(1) Guidelines establish four prerequisites to approval, one of which, the basis for the LEDPA requirement, requires that there are no practicable alternatives to the proposed discharge that would have a less adverse effect on the aquatic environment.\(^{13}\) Noncompliance with this requirement is a sufficient basis for the Corps to deny the project permit.\(^{14}\) The LEDPA determination is thus most important of the four prerequisites for determining compliance with the Guidelines.\(^{15}\)

The 404(b)(1) Guidelines compliance process will be managed by the Corps and the Corps will make all final permit decisions including whether the Guidelines have been satisfied; EPA and other resources agencies usually comment on the Corps’ public notice.\(^{16}\) However, EPA, the Department of the Interior (Interior), and other resource agencies may become very involved in the 404(b)(1) compliance process pursuant to memoranda of agreement between the Corps and EPA and the Corps and Interior.\(^{17}\) For example, EPA and Interior are encouraged to participate in preapplication meetings with the applicant;\(^{18}\) EPA or Interior may elevate a Corps decision;\(^{19}\) and the Corps must fully

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15. Broadway, supra note 1, at 815.
18. Regulatory Guidance Letter 92-01, supra note 16, at 30991 (encouraging resources agencies to participate "to the maximum extent possible in the pre-application consultation.").
consider EPA’s and Interior’s comments when determining whether the applicant has complied with the 404(b)(1) Guidelines, whether to issue a permit, and what conditions should be placed on the permit. EPA involvement early in the 404(b)(1) Guidelines compliance process may be advantageous for a project applicant because the applicant can address EPA’s concerns early in the review process.

III. LEDPA DETERMINATION

40 C.F.R. section 230.10(a), the basis for the LEDPA determination, states that, except as provided in CWA section 404(b)(2), a permit will not be issued “if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” The LEDPA requirement is an attempt to avoid environmental impacts instead of mitigating them; “if destruction of an area of water of the United States may be avoided, it should be avoided.” The Corps may only approve a project that is the LEDPA. The LEDPA involves two separate determinations; it must be both practicable and the least environmentally damaging. The LEDPA requirement’s purpose is “avoiding significant impacts to the aquatic resources and not necessarily providing


22. Section 404(b)(2) allows the Corps to issue a discharge permit otherwise prohibited under the 404(b)(1) Guidelines after considering the economic impact a discharge will have on navigation and anchorage. 33 U.S.C. § 1344(b); 45 Fed. Reg. 85336, 85336, 85337 (Dec. 24, 1980).

23. This requires the permit applicant to evaluate project alternatives that will result in less adverse impacts to the aquatic environment thereby providing the Corps with the information necessary to determine whether the proposed project is the LEDPA. 40 C.F.R. § 230.12(a)(3)(iv) (2005). Where an alternative does not have a “significant or easily identifiable difference in impact, the alternative need not be considered to have a ‘less adverse’ impact.” 45 Fed. Reg. 85336, 85339-85340 (Dec. 24, 1980).


either the optimal project location or the highest and best property use.”26 EPA Region IX feels that the LEDPA analysis functions most effectively when it is applied by the project applicant to the project early in the permitting process.27 EPA believes that the LEDPA requirement compels a project applicant to evaluate non-aquatic sites or less environmentally damaging aquatic site alternatives regardless of whether a project is water dependent or proposed for a special aquatic site.28 The LEDPA determination functions to identify and rank project alternatives; the LEDPA requirement “prohibits discharges if avoidance is practicable and sets the order of development between competing sites.”29

To determine the LEDPA, the project applicant is required to generate a list of alternatives, including the proposed project, from which the LEDPA will be determined.30 This process of identifying alternatives and determining the LEDPA is commonly called the “404(b)(1) Alternatives Analysis.”31 The list of alternatives from which the LEDPA is selected is created after the basic purpose of the project is identified because only alternatives that meet the project’s basic purpose need be consid-

26. Appropriate Level of Analysis, supra note 8, at 9. The Corps has stated that the LEDPA determination “clearly is intended to discourage unnecessary filling or degradation of wetlands . . . .” Plantation Landing, supra note 24, at 2. EPA Region IX has stated that the LEDPA determination “should ensure that most projects are sited out of the nation’s water and that only projects that are absolutely necessary and environmentally acceptable receive permits.” Yocom, supra note 3, at 296.

27. Yocom, supra note 3, at 296; Uram, supra note 1, at 59; Regulatory Guidance Letter 92-1, supra note 16, at 30991.

28. Appropriate Level of Analysis, supra note 8, at 1.

29. Uram, supra note 1, at 15.

30. Where a proposed project is subject to NEPA and the Corps is the permitting agency, the environmental documentation prepared to satisfy NEPA’s requirements for an alternatives analysis will generally provide the information necessary for evaluating alternatives under the CWA guidelines. 40 C.F.R. § 230.10(a)(4), (5) (2005); 45 Fed. Reg. 85336, 85340 (Dec. 24, 1980). However, even though the NEPA documentation may provide sufficient information for the LEDPA analysis and determination, a separate LEDPA analysis must be performed. The Corps’ Sacramento District Regulatory Program indicated that the LEDPA determination is more stringent than the NEPA alternatives analysis. Telephone Interview with Michael Jewell, Regulatory Program Representative, U.S. Army Corps of Engineers (June 22, 2004) (all comments of Mr. Jewell reflect his personal views and are not necessarily the official position of the Corps). The analysis may be a separate document submitted to the Corps or may be included as an appendix in other environmental documentation submitted to the Corps.

31. Uram, supra note 1, at 15.
erected. All alternatives that achieve "the basic project purpose practicably should be considered." The geographic scope of the alternatives considered will in most cases be determined by the basic purpose of the project and will include areas typically considered in the particular industry. If the list of alternatives is inadequate the Corps may require the applicant to expand its analysis.

The applicant will also establish specific criteria to use in determining the practicability of the alternatives and eliminating the non-practicable alternatives—those that do not meet the screening criteria. The Corps will review the applicant's screening criteria and document how the criteria were developed and utilized. The criteria allow the Corps to justify why some alternatives are practicable and others are not. The alternatives analysis must be fair, balanced, and objective, "and not used to provide a rationalization for the applicant's preferred result (i.e., that no practicable alternatives exist)."

The project applicant must provide sufficient evidence to the Corps demonstrating that the proposed project is the LEDPA and that all impacts to the selected site have been avoided to the extent practicable. The applicant bears the burden of demonstrating to the Corps that no less environmentally damaging practicable alternative is available and that the project complies with

32. Old Cutler, supra note 9, at 6. It is recommended that an applicant approach the Corps with a project idea and a justified need for the project and that the applicant and the Corps determine the project's purpose before the applicant proceeds any further with the alternatives analysis. Interview with Ken Bogdan, supra note 3. Ideally, the Corps would sign off on the basic project purpose, thereby focusing the alternatives analysis. CCWD followed this method for Los Vaqueros. Id. The Corps signed off on the project's basic purpose before anything else was done. Id. The basic project purpose was then used to guide the alternatives analysis.

33. Yocom, supra note 3, at 294.
34. Yocom, supra note 3, at 293.

35. The Corps will usually require the applicant to look at both onsite and offsite alternatives as well as different combinations/configurations of the each. Interview with Lisa Clay, supra note 4; see also EPA/Corps MOA (1990), supra note 2, at 9212; 40 C.F.R. §§ 230.10(a)(1)(i) and (ii), 230.5(c) (2005).

36. Hartz Mountain, supra note 9, at 4.
37. Old Cutler, supra note 9, at 9.
38. Hartz Mountain, supra note 9, at 6.

39. Yocom, supra note 3, at 283; Old Cutler, supra note 9, at 5. Where the project applicant does not provide the Corps with sufficient information to make a reasonable judgment as to whether the project complies with the 404(b)(1) guidelines, the Corps will reject the project. 40 C.F.R. § 230.12(a)(3)(iv) (2005); see also Yocom, supra note 3, at 296 and Wendel, supra note 4, at 107.
the 404(b)(1) Guidelines. The Corps will determine whether the LEDPA has been selected.

A. Practicability Determination and Presumption

Only practicable alternatives to the proposed project need be considered in determining the LEDPA. An alternative is practicable where "it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." The Corps will determine whether practicable alternatives are available.

1. "Overall Project Purpose" and "Basic Project Purpose"

An alternative is only practicable if it capable of being done taking into consideration the overall project purpose. Region IX opines that "overall project purpose" means the "basic project purpose plus consideration of costs and technical and logistical feasibility." Overall project purpose does not include secon-

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40. Old Cutler, supra note 9, at 5; Plantation Landing, supra note 24, at 7; Yocom, supra note 3, at 283.
43. 40 C.F.R. § 230.10(a)(2) (2005); see also 40 C.F.R. § 230.3(q) (2005). The project's purpose will be determined before alternatives which achieve the project's purpose are developed. Once the project purpose is determined, alternatives will be developed, and then the LEDPA analysis will be applied to the alternatives to determine which of the alternatives is the LEDPA. Some have argued that this definition is too broad and that it "gives no indication of how the crucial factors of cost and project purposes should be taken into account in reach a decision on the availability." Wendel, supra note 4, at 103.
44. Plantation Landing, supra note 24, at 8.
45. Id. at 289. There is some uncertainty whether the Corps distinguishes between "overall project purpose" and "basic project purpose" and, if it did, whether it would make any practical difference. Corps counsel in Sacramento indicated that the Corps does not distinguish between the two phrases. Interview with Lisa Clay, supra note 4. Some practitioners feel there is no difference between the two phrases, but that there is enough ambiguity between the two that the Corps could distinguish, albeit with little practical effect, between the two if they wished. Interview with Ken Bogdan, supra note 3. One Corps representative indicated that the overall project purpose drives the alternatives analysis, while the basic project purpose drives the water dependency determination. Telephone Interview with Michael Jewell, supra note 30. The Corps' elevated decision, Twisted Oaks, follows Jewell's view. Twisted Oaks, supra note 9, at 6. However, 40 C.F.R. § 230.10(a)(2) (2005) refers to both "overall project purpose" and "basic purpose" in the same section, which tends to indicate that the two phrases are interchangeable. See Plantation Landing, supra note 24, at 9. Furthermore, EPA has stated that the two phrases are used interchangeably. Final Determination of the U.S. Environmental Protection
dary project purposes, site-specific secondary requirements, project amenities, desired size requirements, or desired return on an investment. For example, EPA disallowed a proposed dam’s proposed project purpose which included flow releases for the enhancement of downstream fish habitat. EPA also disallowed a proposed dam’s proposed overall project purpose to capture run-off in the specific stream where the dam was to be constructed. EPA disallowed each project’s stated overall project purpose because to accept them would preclude an analysis of otherwise legitimate options.

A project’s “basic purpose” is its generic purpose or function. The Corps will define the basic purpose, not the project applicant, but the Corps may discuss with the applicant what the basic project purpose should be. The Corps will typically view the project’s purpose from the applicant’s perspective rather than the public’s perspective, though arguably the Corps is not required to do so and may use the public perspective. In defining the project’s basic purpose the Corps is not required by the Guidelines to define the project’s purpose “in the manner most

Agency’s Assistant Administrator for Water Pursuant to Section 404(c) of the Clean Water Act Concerning the Two Forks Water Supply Impoundments (Nov. 23 1990), 2, 2 n.2 [hereinafter Two Forks Final Determination]; Uram, supra note 1, at 18, 59. The Andalex Resources elevation decision did not distinguish the two, and stated that EPA and the Corps should provide clarification on the issue, and that an elevation decision was not the proper forum to decide whether there is a distinction. Department of the Army, U.S. Army Corps of Engineers, Request for Permit Elevation, Andalex Resources, Inc. (1991) 3-4, 8.

46. Yocom, supra note 3, at 289.
47. Id.
48. Id.
49. Id.
50. Yocom, supra note 3, at 290. Determining the project’s basic purpose is significant in determining whether an alternative is practicable. It is also significant later in the process in determining whether a project is water dependent.
51. Plantation Landing, supra note 24, at 6, 8; Hartz Mountain, supra note 9, at 3; Twisted Oaks, supra note 9, at 5; McGreevey, supra note 17, at 400. The determination in Plantation Landing that the Corps and not the applicant defines the project purpose was significant because the Corps policy had formerly been to defer to the applicant’s stated purpose in determining the project’s basic purpose. Uram, supra note 1, at 16-17.
52. Plantation Landing, supra note 24, at 7. In Plantation Landing, viewing the project purpose from the applicant’s perspective meant that the applicants’ land clearing project was defined as being “to increase soybean production or to increase net returns on assets owned by the company” as opposed to “providing the U.S. public a sufficient supply of soybeans, consistent with protection of wetlands.” Plantation Landing, supra note 24, at 7-8; see also McGreevey, supra note 17, at 403, 405(stating that “defining project purpose from the public perspective is both permissible and appropriate by all accounts”).
favorable to 'environmental maintenance'.”53 The Corps “has a
duty to take into account the objectives of the applicant’s pro-
ject” in analyzing project alternatives.54 Furthermore, the Corps
has “some discretion” in defining the project’s basic purpose “in
a manner which seems reasonable and equitable for that particu-
lar case.”55 However, while the Corps will consider the appli-
cant’s stated purpose, the Corps will determine the project’s
purpose and will not be limited by or required to give undue def-
erence to the proponent’s stated purpose.56 The Corp will not be
a project opponent or advocate, but will provide an objective
evaluation.57

The Corps’ Old Cutler decision stated that the Corps may not
so narrowly define the project’s basic purpose “so as to unduly
restrict a reasonable search for potential practicable alterna-
tives.”58 Old Cutler also stated that the project purpose must be
defined so that the “applicant is not in the position to direct, or
attempt to direct, or appear to direct the outcome of the Corps

53. Plantation Landing, supra note 24, at 8.

54. Louisiana Wildlife Fed’n v. York, 761 F.2d 1044, 1048 (5th Cir. 1985); see also

Plantation Landing, supra note 24, at 4 (stating that the Corps should “consider” the

applicant’s views).

55. Hartz Mountain, supra note 9, at 4.

56. Plantation Landing, supra note 24, at 4, 7, 8; Old Cutler, supra note 9, at 6;

Hartz Mountain, supra note 9, at 3; supra note 10, at 5; Alameda Water and Sanita-
tion Dist. v. Reilly, 930 F.Supp. 486, 492 (D. Co. 1996); McGreevey, supra note 17, at

400. The applicant bears the burden of proving that an alternative does not achieve

the applicant’s purpose. Greater Yellowstone Coalition v. Flowers, 359 F.3d 1257,

1270 (10th Cir. 2004). Because a project is only practicable to the extent it achieves

the project’s basic purpose, and the Corps will consider the applicant’s purpose, how

an applicant defines their project’s purpose is critical. EPA Region IX believes that

there are no basic project purposes that are invalid under the 404(b)(1) Guidelines,

but that there are unacceptable ways of defining the basic project purpose. Yocom,

supra note 3, at 291. Examples of unacceptable basic project purposes are “water-

front housing,” “development,” “redevelopment,” “making money,” “increasing a
tax base,” or “generating revenues for redevelopment.” Yocom, supra note 3, at

291-92; see also Plantation Landing, supra note 24, at 9-10.

57. Corps/Interior MOA (1992), supra note 16, at 2; Regulatory Guidance Letter

92-1, supra note 16, at 30991.

58. Old Cutler, supra note 9, at 13-14, 6; see also Hartz Mountain, supra note 9, at

4 and Sylvester v. U.S. Army Corps of Engineers, 882 F.2d 407, 409 (9th Cir. 1986)

(stating that an applicant cannot define their project so as to preclude the possibility

of alternative sites, making impossible what is practicable).
A project purpose should be concisely stated in one or two sentences. 60

(a) Examples of Basic Project Purposes

The basic project purpose of the Contra Costa Water District’s (CCWD) Los Vaqueros reservoir project was “to improve the quality of potable water delivered to the service area of CCWD and to improve the reliability of water supply by providing for increased emergency storage.” 61 This project purpose is more narrow than “water storage” or “increasing potable water supply.” This indicates that the Corps may allow an applicant to tailor the proposed project’s basic purpose.

In the Corps’ Twisted Oaks decision, Corps headquarters disallowed the Corps District’s basic purpose definition for a residential subdivision project with a proposed lake that was “to provide an upscale, water oriented, residential development having related recreational amenities to allow the applicant to realize a profit on its investment.” 62 Corps Headquarters stated that because the project included two elements, a recreational lake and a residential development, that “a definition of project purpose excluding either one would not be sufficient.” 63 Corps Headquarters defined the basic purpose as “to provide a viable, upscale, water oriented, residential development having water related recreational amenities.” 64 Corps Headquarters, however, determined that the District’s description was appropriate as the project’s overall project purpose. 65

EPA defined the basic purpose of the proposed Two Forks Dam in Colorado to be “the provision of dependable, long-term...
water supply to the Denver metropolitan area." EPA did not allow the Two Fork Dam proponents to include as part of the basic purpose a provision for water at the least cost.

The Corps defined a proposed golf course/residential community development's basic purpose as "to construct a viable upscale residential community with an associated regulation golf course in the South Dade County area." This determination is significant because it defines a residential proposed housing development's basic purpose to be more than "housing" or "shelter" by allowing its basic purpose to be "upscale housing" with a "regulation golf course." The Corps disallowed a version of the project's basic purpose that included a minimum number of houses and specified a Jack Nicklaus designed golf course because such a purpose was too narrow.

The Corps' *Hartz Mountain* decision defined the basic project purpose of a residential housing development as "construction of a large scale, high density housing project in the Region 1 area."

2. "Capable of being done"

An alternative is only practicable if it is capable of being done. An alternative is capable of being done where it will accomplish the project's basic purpose taking into account cost, existing technology, and logistics. For example, the construction of a dam in an area that is seismically unsound is not capable of being done, even though it may be physically possible to construct the dam in that location.

3. "Cost"

The applicant must develop criteria to evaluate and eliminate alternatives based on cost. Where an alternative is "unreasona-

66. Final Determination of the U.S. Environmental Protection Agency's Assistant Administrator for Water Pursuant to Section 404(c) of the Clean Water Act Concerning the Two Forks Water Supply Impoundments (Nov. 23 1990), 2-3.
67. *Id.*, at 22; see also *Uram*, *supra* note 1, at 59.
68. *Old Cutler*, *supra* note 9, at 7, 12.
69. *Uram*, *supra* note 1, at 18.
70. *Id.*
71. *Hartz Mountain*, *supra* note 9, at 6. Other examples of basic project purposes for condominium housing is "housing/shelter" and for a restaurant, to feed people. *Plantation Landing*, *supra* note 24, at 12.
72. *Yocom*, *supra* note 3, at 288.
73. *Id.*
bly expensive to the applicant” the alternative is not practicable.\textsuperscript{74} The applicant’s financial standing is not a factor in determining whether an alternative is practicable; costs will usually be examined from the perspective of what are reasonable costs for the proposed project (i.e., what the reasonable cost of a dam is), not whether the applicant can afford the cost of the alternative.\textsuperscript{75} For example, a developer with insufficient funds to purchase other available land, where the project could profitably be constructed, may be unable to obtain a discharge permit for the developer’s proposed site.\textsuperscript{76} That the applicant’s financial standing is not to be considered is evidenced by the Guidelines reference to “cost” instead of “economic” concerns.\textsuperscript{77} “Economic” was not used because it suggests a “consideration of the applicant’s financial standing, or investment, or market share, a cumbersome inquiry which is not necessarily material to the objective of the guidelines.”\textsuperscript{78}

4. “Available”

An alternative is only practicable if it is “available” to the project applicant.\textsuperscript{79} An alternative is available to a project applicant where the property is obtainable for meeting the project’s purpose.\textsuperscript{80} The looseness of this definition has caused conflict over the availability of potential alternatives.\textsuperscript{81} Some guidance is available on the issue. Sites owned by the applicant, sites that can be obtained by the applicant, and even sites that were available to the applicant when they started project planning (not when they applied for a permit) are considered available.\textsuperscript{82} “If it is

\textsuperscript{75} \textit{Yocom}, supra note 3, at 294-295; \textit{Appropriate Level of Analysis}, supra note 8, at 5; \textit{WANT}, supra note 14, at 6-14.
\textsuperscript{76} \textit{Yocom}, supra note 3, at 295.
\textsuperscript{77} \textit{McGreevey}, supra note 17, at 402.
\textsuperscript{78} \textit{McGreevey}, supra note 17, at 402 citing 45 Fed Reg. 85336, 85339.
\textsuperscript{79} 40 C.F.R. § 230.10(a)(2) (2005); \textit{Plantation Landing}, supra note 24, at 7.
\textsuperscript{80} \textit{Yocom}, supra note 3, at 287; 45 Fed. Reg. 85336, 85339 (Dec. 24, 1980).
\textsuperscript{81} \textit{Wendel}, supra note 4, at 102; \textit{McGreevey}, supra note 17, at 386.
\textsuperscript{82} 40 C.F.R. § 233.10(a)(2) (2005). 40 C.F.R. section 230.10(a)(2) (2005) states that “if it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity may be considered.” Land that was available to the project proponent at the time of “market entry” that is not available when the proponent applies for a permit, may still be considered available as an alternative. Bersani v. U.S. EPA (2nd Cir. 1988) 850 F.2d 36, 38 (2d. Cir. 1988) (upholding EPA’s veto of a project because an alternative site was available to plain-
otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity may be considered.”83 A site that can be expanded, converted, modified, or renovated to meet the project’s basic purpose may also be considered available.84 Laws that prohibit site development may also be a factor in determining whether an alternative is available.85

Technically, under the “market entry” theory, land that was available to the project proponent at the time of “market entry” that is not available when the proponent applies for a permit, may still be considered available as an alternative.86 However, the Corps may not follow this rule very rigidly; a good faith effort to look at alternatives is usually sufficient.87 A potential inequity of the “market entry” test is that it does not clearly define what constitutes “entry.”88 The test is also potentially inequitable in that it disfavors parties who have owned property for a long period of time who may not have evidence to rebut applicable presumptions and because the party possibly entered the market at a time when an area was not extensively developed and many alternatives were available.89 Furthermore, though a potential site may not be available to a current applicant because it had alternatives at the time of market entry, the test does not preclude the site from being available for another subsequent applicant if this later applicant did not have other alternatives available to it at the time it entered the market.90 Generally, EPA Region IX will not look back to sites that were available to the applicant prior to 1980 when the 404(b)(1) Guidelines were promulgated.91 Lastly, the “market entry” test also potentially

84. 40 C.F.R. § 230.10(a)(2) (2005); Yocum, supra note 3, at 288. Existing sites may be the LEDPA because they will usually be less environmentally damaging than constructing the project on a new site and may be less costly to develop (making them practicable). Yocum, supra note 4, at 288.
85. Uram, supra note 1, at 59.
86. Bersani 850 F.2d at 36.
87. Interview with Ken Bogdan, supra note 3.
88. Broadway, supra note 1, at 826.
89. Broadway, supra note 1, at 825; McGreevey, supra note 17, at 397.
90. McGreevey, supra note 17, at 392.
91. Yocom, supra note 3, at 287.
allows a party to circumvent the rule through the use of an investor that "enters" the market before the future applicant and purchases sites making them unavailable to the future applicant at the time it enters the market. The market entry test may be inappropriate because it looks at the status of the applicant, not at the larger issue of whether the site should be developed.

5. Practicability Presumption

The "practicability presumption" introduces the concepts of a "special aquatic site" (SAS) and "water dependency" to the 404(b)(1) analysis. These are related concepts: a project is water dependent where it requires access or proximity to or siting within a SAS to fulfill its basic purpose. Under the practicability presumption, the Corps will presume that practicable alternatives exist where the project is non-water dependent and will cause a discharge in a special aquatic site. Conversely, where a project is water dependent, there is no presumption that practicable alternatives are available which do not involve a SAS. Even if a project is water dependent, where it is proposed for a SAS, it must still be the LEDPA to be approved.

This presumption is intended to implement the Corps' policy that "from a national perspective, the degradation or destruction of special aquatic sites, such as filling operations in wetlands, is considered to be among the most severe environmental impacts covered" by the Guidelines. The presumption is intended to "increase the burden on an applicant for a non-water dependent activity to demonstrate that no practicable alternative exists to his proposed discharge in a [SAS]."

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92. McGreevey, supra note 17, at 398.
93. McGreevey, supra note 17, at 393.
94. This is the first presumption in the LEDPA analysis.
97. Yocom, supra note 3, at 285.
98. 40 C.F.R. § 230.1(d) (2005); see also Wendel, supra note 4, at 111 (stating that "the presumption is intended to provide the developer with an incentive to search for alternatives").
99. Plantation Landing, supra note 24, at 3. This increased burden is added to the Guidelines' general presumption against discharges into an aquatic ecosystem found at 40 C.F.R. section 230.1(c). Plantation Landing, supra note 24, at 3. Section
the Corps to take a "hard look" at the possibility of using environmentally preferable sites and to discourage discharges into a SAS. Lastly, the presumption provides an incentive to avoid constructing in wetlands. The Corps has stated that the Army Corps of Engineers is serious about protecting water of the United States, including wetlands, from unnecessary and avoidable loss. Further, the Corps should inform developers that special aquatic sites are not preferred sites for development and that nonwater dependent activities will generally be discouraged in accordance with the Guidelines.

The 404(b)(1) Guidelines have been written to "provide an added degree of discouragement for non-water dependent activities proposed for SAS." The presumption is very strong, but it may be rebutted and a permit may be granted for a project in a SAS that is not water dependent. However, if the presumption is not rebutted, a permit may not be issued for the proposed project. To rebut this presumption and obtain approval for the proposed alternative, the applicant must show by clear and convincing evidence that there are no practicable alternatives which will not cause a discharge into a SAS. The Corps will make the water dependency determination.

(a) SAS

The first step in applying this presumption that practicable alternatives exist is to determine whether the proposed project will

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230.1(c) states that "Fundamental to the Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern."

100. Old Cutler, supra note 9, at 5.

101. Wendel, supra note 4, at 111-112 (stating that such an incentive is necessary because "in general the permit applicant has no market-derived incentive to analyze upland sites as alternatives").


105. Yocom, supra note 3, at 284. For example, Los Vaqueros Reservoir was not determined to be water dependent, but was still the LEDPA and eventually constructed. Interview with Ken Bogdan, supra note 3.

106. Plantation Landing, supra note 24, at 9, 12, 13-14; 45 Fed. Reg. 85336, 85339 (Dec. 24, 1980); see Department of the Army, South Pacific Division, Corps of Engineers Review of Sundance Plaza Project Permit Denial (Feb. 5, 2001), 1, 8.
result in a discharge in a SAS. SASs are defined by two separate EPA regulations: 40 C.F.R. section 230.3(q-1) and Subpart E (40 C.F.R. §§ 230.40-.45). EPA Region IX and the Corps use Subpart E to identify SASs. Subpart E states that "the definition of [SAS] is found in § 230.03(q-1)" but specifically lists the following as SASs: sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle and pool complexes.

(b) Water Dependency Determination

The next step in determining whether the presumption applies is to determine whether the proposed project is water dependent. If the project is water dependent, even where the project affects a SAS, the Corps will not presume that alternatives not involving a SAS are available. A project is water dependent if it requires access or proximity to or siting within a SAS to fulfill its basic purpose.

107. The water dependency determination is important because EPA and the Corps scrutinize non-water dependent projects more thoroughly than water-dependent projects. The Corps has stated that housing, restaurants, cafes, bars, retail facilities, or convenience stores will not be considered water dependent. Plantation Landing, supra note 24, at 12. Neither will these projects be considered water dependent where the applicant proposes to integrate them with a marina or seeks to build them as waterfront projects. Id. If a project is proposed for a SAS, a second presumption, discussed in section b below, that discharges into SASs are more environmentally damaging than discharges that are not into SASs, will apply. If a project is proposed for a SAS, the applicant will be required to rebut both of these presumptions. 45 Fed. Reg. 85336, 85339 (Dec. 24, 1980); Plantation Landing, supra note 24, at 12.

108. Section (q-1) states that "[SAS] means those sites identified in subpart E" and are "geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values." Wetlands are especially protected by regulations. 33 C.F.R. section 320.4(b)(1) (2005) states that "most wetlands constitute a productive and valuable public resources, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest." See also 33 C.F.R. § 320.4(b)(4) (2005), WANT, supra note 14, at 6-29.

109. EPA/Corps MOA (1990), supra note 2, at 9212; Yocom, supra note 3, at 284; Telephone Interview with Hugh Barroll, Counsel, U.S. Environmental Protection Agency Region IX (April 17, 2006); Telephone Interview with Calvin Fong, Regulatory Branch Chief San Francisco District, U.S. Army Corps of Engineers (June 8, 2004).


111. Demand for the project is irrelevant to whether the proposed project is water dependent. Plantation Landing, supra note 24, at 10; Hartz Mountain, supra note 9, at 6. See also Twisted Oaks, supra note 9, at 13.

112. 40 C.F.R. § 230.10(a)(3). Where a project with multiple components is proposed, the water dependency determination will be applied to each separate component and each component's basic purpose will be used in the determination. Plantation Landing, supra note 24, at 12; Yocom, supra note 3, at 283, 290-91.
James City County stated that a reservoir was water dependent because its basic purpose was to impound a stream. In Twisted Oaks, the Corps determined that an earthen dam associated with a residential development was water dependent because it required siting in Rice Creek. EPA does not automatically consider, for example, a dam, a reservoir, or even a pier, to be water dependent, because while they may require access to water, they do not necessarily need to be sited in a SAS. Under this rationale, an offstream reservoir will not be considered water dependent, and an onstream reservoir may, but will not automatically, be considered water dependent.

In Twisted Oaks, the Corps determined that the overall project purpose of a residential development with a water related amenity (a small lake) was not water dependent, even though the project contained a water dependent element (a small dam). Therefore, if any part of the project is not water dependent, the project as a whole will not be considered water dependent. In Plantation Landing, the Corps determined that housing, restaurants, cafes, bars, retail facilities, and convenience stores were not water dependent, even where they were part of a waterfront development. Each part of the project was analyzed in terms of its non-water dependent function; adding "water front" to a development will not automatically make a project water-dependent. In Hartz Mountain, the Corps determined that a 3,301 unit residential housing development proposed to be constructed in wetlands was "clearly not a water dependent activity."

Where a part of a multi-part project is water dependent and other parts are not, the overall project purpose is not water dependent. Twisted Oaks, supra note 9, at 6, 8.

113. James City County, supra note 96, at 351-52.
114. Twisted Oaks, supra note 9, at 6, 8. Even though the earth dam was water dependent, the overall project was not water dependent because the residential aspect of the development was not water-dependent. Twisted Oaks, supra note 9, at 6; Two Forks Final Determination, supra note 45, at Appendix p. 11 (vetoing the Two Forks Dam, EPA stated that the dam's purpose was to provide a dependable water supply and that reservoirs are not inherently water dependent because, while a reservoir may ordinarily require a connection to some water, the water need not be a SAS).
115. Telephone Interview with Hugh Barroll, supra note 110.
116. Twisted Oaks, supra note 9, at 6. 8.
117. Plantation Landing, supra note 24, at 12.
118. Id. at 11-12; see also Twisted Oaks, supra note 9, at 6.
119. Hartz Mountain, supra note 9, at 3.
B. Least Environmentally Damaging Determination and Presumption120

In order to be approved as the LEDPA, in addition to being practicable, the proposed project alternative must be the least environmentally damaging of the practicable alternatives. It should be noted, that if an alternative is as environmentally damaging and not less environmentally damaging to the aquatic ecosystem than the proposed project or if a practicable alternative has significant environmental impacts of its own, the alternative will not be the least environmentally damaging.121 EPA Region IX generally considers the alternatives involving the least amount of filled waters and those that avoid ecologically-significant areas to be the least damaging.122 In determining which alternative is the least environmentally damaging, the Corps will presume that practicable alternatives not including a discharge into a SAS will have a less adverse impact and, therefore, be environmentally preferable unless the applicant demonstrates otherwise.123 This presumption is rebuttable, but it is rarely overcome.124

This presumption applies where the project proposes a discharge into a SAS, regardless of whether the project is water dependent or proposed for a SAS; the presumption focuses on the location of the discharge, not water-dependency.125 This presumption is a tool for ranking practicable alternatives according to their environmental impacts.

IV. MITIGATION IN DETERMINING THE LEDPA

In addition to the LEDPA determination, the Guidelines require that the applicant have taken all appropriate and practica-

120. This is referred to as Presumption #2 in the flow chart at Appendix 1.
121. 40 C.F.R. § 230.10(a) (2005); see also Department of the Army, U.S. Army Engineer District, Sacramento, Record of Decision Delta Wetlands Properties Application No. 190109804 (July 15, 2002), 2.
122. Yocom, supra note 3, at 283, 285. The project affecting the least amount of wetlands is typically considered the least environmentally damaging. Interview with Ken Bogdan, supra note 3.
123. There is no case law interpreting this presumption.
124. Yocom, supra note 3, at 285; 40 C.F.R. § 230.10(a)(3) (2005); 45 Fed. Reg. 85336, 85339 (Dec. 24, 1980) (stating that in 1975 the presumption was irrebuttable, but was changed to recognize that discharges to wetlands are not always the most environmentally damaging alternative).
ble steps to minimize potential adverse impacts of the discharge on the aquatic environment. \textsuperscript{126} Therefore, because mitigation will be required for any potential adverse impacts on the aquatic environment even where the LEDPA is selected, this section describes how this mitigation requirement relates to the LEDPA determination. The LEDPA will be determined first and then appropriate and practicable steps must be taken to mitigate any impacts the LEDPA may cause. \textsuperscript{127} The Corps and EPA Region IX will not consider proposed mitigation for a project in determining the LEDPA. \textsuperscript{128} Courts have upheld EPA's policy to conduct its alternatives analysis without considering mitigation measures. \textsuperscript{129} This sequence of determining the LEDPA prior to mitigation is to implement Corps' and EPA's agreed upon sequence for mitigating impacts to aquatic sites. The sequence is that first, the applicant must seek to avoid the impacts, then minimize the project's impacts, then the applicant must provide compensatory mitigation for any aquatic sites that are destroyed. \textsuperscript{130}

Mitigation that is not practicable or will result in only inconsequential environmental benefits will not be required. \textsuperscript{131} The determination of what level of mitigation is appropriate will depend on the value and functions of the impacted aquatic resource and should be practicable and appropriate to the scope and degree of the impacts. \textsuperscript{132} The required mitigation will become a permit condition. \textsuperscript{133}

V.
EPA VETO AUTHORITY

While the Corps administers the LEDPA determination, the EPA exercises an oversight role through its ability to veto a

\begin{itemize}
\item \textsuperscript{126} 40 C.F.R. § 230.10(d) (2005).
\item \textsuperscript{127} 40 C.F.R. § 230.10(d) (2005).
\item \textsuperscript{128} EPA/Corps MOA (1990), supra note 2, at 9211-9212.
\item \textsuperscript{129} EPA/Corps MOA (1990), supra note 2, at 9212; Hartz Mountain, supra note 9, at 7; Yocom, supra note 3, at 3-4; Twisted Oaks, supra note 9, at 5 and 5 n.2; Uram, supra note 1, at 17, 60.
\item \textsuperscript{130} Alameda Water and Sanitation Dist., 930 F.Supp. at 492.
\item \textsuperscript{131} EPA Corps MOA (1990), supra note 2, at 9211; Old Cutler, supra note 9, at 10.
\item \textsuperscript{132} EPA Corps MOA (1990), supra note 2, at 9211, 9212.
\item \textsuperscript{133} EPA Corps MOA (1990), supra note 2, at 9213
\end{itemize}
Corps LEDPA determination. Though rare, EPA may veto a Corps-approved project where EPA determines that the project would have an “unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas.” An “unacceptable adverse effect” results from an “impact on an aquatic or wetland ecosystem which is likely to result in significant degradation” of the resources listed in section 1344(c). Before deciding to veto a project, the EPA must consult with the Secretary of the Army and publish notice of its proposed determination. If EPA has notified the Corps that it is considering exercising its veto authority, the Corps may not issue a permit until final action is taken by the EPA. EPA must put in writing its findings and reasons supporting its determination that unacceptable adverse effects will occur which justify a veto of the project.

Where the proposed project is not the LEDPA, the availability of a LEDPA, where it is truly available, is an adequate basis for EPA’s determination that unacceptable adverse environmental effects will result. However, under James II, even where there is no less environmentally damaging alternative to the proposed project, EPA may still veto the project based solely on a determination that the environmental effects of the project are too great. This means that even if the project has been determined by the Corps to be the LEDPA and is approved by the Corps, EPA may still scrutinize and potentially veto a project approved by the Corps as the LEDPA.


135. 33 U.S.C. § 1344(c); 40 C.F.R. § 231.1 (2005); James City County, 758 F.Supp at 348; James II, 12 F.3d at 1330; Alameda Water and Sanitation Dist., 930 F.Supp. at 486. EPA vetoes are rare probably out of deference to the Corps’ central role in administering the Guidelines. Wendel, supra note 4, at 1113-1114.

136. 40 C.F.R. § 231.2(e) (2005).


139. 33. U.S.C. § 1344(c); 40 C.F.R. § 231.6 (2005).

140. See 56 Fed. Reg. 76-02 (Jan. 2, 1991) (stating that one of the reasons EPA denied the proposed Two Forks dam was because it would cause unacceptable loss and damage; the damage the dam would cause was unacceptable because the damage was avoidable. The damage was avoidable because the proposed project was not the LEDPA).

141. James II, 12 F. 3d at 1335-36. See also EPA/Corps MOA (1990), supra note 2, at 9212 n.5.
VI.
CONCLUSION

In order to obtain a 404 permit, the applicant must demonstrate that the proposed project is the LEDPA. The LEDPA determination is a critical element of complying with the EPA's 404(b)(1) Guidelines. The LEDPA determination is one determination in a much larger process. Because the LEDPA is one of many determinations, an applicant may underestimate its importance. However, overlooking the LEDPA could be a fatal mistake.
APPENDIX 1

PHASE I: IDENTIFY ALTERNATIVES

Step 1: Submit Application to Corps.
33 C.F.R. § 323.1 (a)(3), (9), (c)

PHASE II: PRACTICABILITY ANALYSIS

Step 2: Identify basic project purpose & screening alternatives w/ Corps.

Step 3: Identify potential alternatives that achieve overall basic purpose of proposed activity applying screening criteria? 230.10 (a)(2).

Step 4: Is alternative in SAS? Yes

Step 5: Is alternative capable of being done, taking in consideration the cost of existing technology (Cost/Benefit Analysis)?
No Not Practicable

Yes

Step 6: Is alternative available to the applicant? 230.10 (a)(2)
No Not Practicable

Yes

Step 7: Was alternative available to the applicant during project planning? (Marketing Test from Bransco v. U.S. EPA 590 F.3d 56)
No Not Practicable

Yes

Step 8: Practicable alternative identified

Step 9: Identify practicable alternative with least impact to the aquatic ecosystem; Discharge to non-SAS presumed to be less environmentally damaging (Presumption # 2)

Step 10: Does this alternative cause other significant adverse environmental consequences? 230.10 (a)

Step 11: Alternative is LEDFA and complies with section 230.10 (a) of the Guidelines; draft permit sent to resource agencies who may elevate.

If not rebutted, project alternative is eliminated and other alternatives are presumed to exist which must be evaluated.

If rebutted, Corps will presume that practicable Non-SAS alternatives exist (Presumption # 1)

Water dependent based on basic project purpose (Corps defined)?

Yes, water dependent 230.10 (a)(3)

Not water dependent 230.10 (a)(3)

*This chart is partially based on a chart found in State Water Resources Control Board, Division of Water Quality, Water Quality Certification Program publication entitled CWA Section 401, Policy & Regulatory References.