

PCoP Workshop 2015
How to write and respond to comments.

CHALLENGE 1: Write a policy comment using the guidance and the report text provided.

GUIDANCE: ER 1105-2-100 Exhibit G-1. 3.c. “Where two cost-effective plans produce no significantly different levels of net benefits, the less costly plan is to be the NED plan, even though the level of outputs may be less.”

SAMPLE REPORT LANGUAGE: As defined in the Principles and Guidelines (1983), the National Economic Development (NED) plan is the one that ‘reasonably maximizes net NED benefits consist with protecting the nation’s environment.’ The economic analysis for the final array of alternatives is presented in Table 31. Alternative E maximizes net NED benefits with average annual benefits of \$48,240,000; average annual costs of \$16,860,000; and average annual net benefits of \$31,380,000. Therefore, Alternative E is the NED plan is being recommended for implementation (See Chapter 6 for more details). The sponsor fully supports the NED Plan and there is no Locally Preferred Plan.

Table 31
Final Array of Alternatives

Alternative	Project First Cost	Average Annual Benefits	Average Annual Costs	Net Benefits	BCR
A	\$311,000,000	\$33,520,000	\$13,780,000	\$19,740,000	2.4
B	\$323,000,000	\$39,320,000	\$14,380,000	\$24,940,000	2.7
C	\$335,000,000	\$45,120,000	\$14,990,000	\$30,130,000	3.0
D	\$353,000,000	\$46,860,000	\$15,910,000	\$30,950,000	2.9
E	\$371,000,000	\$48,240,000	\$16,860,000	\$31,380,000	2.9
F	\$388,000,000	\$48,260,000	\$17,780,000	\$30,480,000	2.7
G	\$405,000,000	\$48,270,000	\$18,720,000	\$29,550,000	2.5

CHALLENGE 2: Write a policy comment using the guidance and the report text provided.

GUIDANCE: ER 1105-2-100 Section 3-3. b. (5) Induced Flooding. When induced flooding results in induced damages, mitigation should be investigated and recommended if appropriate. Mitigation is appropriate when economically justified or there are overriding reasons of safety, economic or social concerns, or a determination of a real estate taking (flowage easement, etc.) has been made. Remaining induced damages are to be accounted for in the economic analysis and the impacts should be displayed and discussed in the report.

ER 1105-2-100 3-3. b.(10) Land Development and Floodplain Management. The following general policy principles apply to land development benefits at structural flood damage reduction projects.

(a) Communities participating in a flood damage reduction project with the Corps of Engineers are required to participate in FEMA’s National Flood Insurance Program (NFIP) and to comply with the land use requirements of that program.

(d) Flood damage reduction projects can greatly impact what is required of a local community for participation in the NFIP. In addressing these impacts, the following should be considered:

- In coordination with the non-Federal sponsor and FEMA, consideration should be given to developing flood maps and flood profiles depicting post-project conditions.

The information should be in a form useful to FEMA in revising flood insurance rate maps.

- The appropriate FEMA Regional office will be notified of proposed flood protection works or of changes to established flood protection works.

SAMPLE REPORT LANGUAGE: Hydraulic modeling of the NED Plan found that 1% ACE flood elevations would increase between 0.0 and 0.6 foot in several areas near the downstream end of the project compared to the without project condition. (There is some level of uncertainty in any hydraulic model. In this case the actual without-and with-project water surface elevations could be 0.5 foot lower or higher than estimated). The increased 1% ACE flood elevations caused by the NED Plan (based on feasibility level hydraulic modeling) would trigger an NFIP regulatory requirement (44 CFR 60.3(d)) that communities must seek conditional approval from FEMA before allowing certain encroachments upon a floodplain. Applications for such conditional approvals must certify, among other things, that no structures are located in areas that would be impacted by increased base flood elevations (44 CFR 65.12(a)(5)). The District considered several options for NFIP compliance and determined the least-cost options for mitigation. The total estimated minimum cost for NFIP compliance is \$195 million. The average annual induced damages are estimated to be \$90,000, which do not support the costs.

While the mitigation measures are not economically justified and did not rise to a real estate takings (see the Real Estate Appendix), the NFIP compliance is a requirement of non-federal participation in flood risk reduction studies. It is an integral part of the NED Plan and to not include it would mean that the NED Plan would not meet the completeness criteria in the Principle and Guidelines. Because of this fact, it is recommended that the full \$195M cost be shared as a project first cost.

CHALLENGE 3: Write a policy comment using the guidance and the report text provided.

GUIDANCE: 33 CFR Sec 335.7 - Federal standard means the dredged material disposal alternative or alternatives identified by the Corps which represent the least costly alternatives consistent with sound engineering practices and meeting the environmental standards established by the 404(b)(1) evaluation process or ocean dumping criteria.

SAMPLE REPORT LANGUAGE: Dredging to the NED Plan depth of - 47FT mean lower low water (mllw) will require disposal of 5 million cubic yards. The least cost plan for disposal is open water disposal in the bay. The next least costly alternative is ocean disposal, costing 35% more per cubic yard of material. These sites are far superior to upland options; the cheapest of which can be as much as double the cost of water disposal when factoring in real estate needs, mitigation requirements, and dike construction. Table 25 shows the estimated costs of disposal the different disposal plans.

There are currently no Federal restrictions prohibiting open water disposal in the bay, but state law prohibits such open water disposal due to environmental concerns with critically threatened and endangered habitat. Therefore, while bay disposal is the cheaper option, it does not meet all environmental laws and thus cannot be considered the Federal standard Base Plan for disposal. The NED Plan includes Ocean Disposal of all 5 million cubic yards of material.

Table 25
Disposal Alternatives with Costs

Alternative	Cubic Yards (CY)	Cost/CY¹	Total Cost
Bay Disposal ²	5,000,0000	\$10	\$50,000,000
Ocean Disposal	5,000,0000	\$13.5	\$67,500,000
Upland Site 1	5,000,0000	\$21	\$105,000,000
Upland Site 2	5,000,0000	\$25	\$125,000,000
1/ Cost/CY includes all costs for placement.			
2/ Bay disposal is prohibited by state law and was screened from further consideration.			

CHALLENGE 4: Write a policy comment using the guidance and the report text provided.

GUIDANCE: ER 1105-2-100 Para 3-3. b. (6) Minimum Flows, Minimum Drainage Area and Urban Drainage. In urban and urbanizing areas provision of a basic drainage system to collect and convey local runoff is a non- Federal responsibility. Water damage problems may be addressed, under flood damage reduction authorities, downstream from the point where the flood discharge is greater than 800 cubic feet per second for the 10 percent flood (one chance in ten of being equaled or exceeded in any given year) under conditions expected to prevail during the period of analysis. Drainage areas which lie entirely within the urban area and which are less than 1.5 square miles in area, are assumed to lack sufficient discharge to meet the above hydrologic criterion. Urban streams and waterways that receive runoff from land outside the urban area shall not be evaluated using this 1.5 square mile drainage area criterion. Exceptions may be granted in areas of hydrologic disparity, that is areas producing limited discharge for the ten percent event but in excess of 1800 cubic feet per second for the one percent event (See ER 1165-2-21).

SAMPLE REPORT LANGUAGE: The Rushing River Basin covers 108 square miles of drainage area from the headwaters to the confluence of the Your Town River; 27 miles at it's widest; and has a total elevation change of over 150 FT. Within the basin are 7 damage centers with approximately two thousand structures valued at over \$175M. Six of the seven damage centers are downstream of discharges that exceed the minimum flow requirements, but one is located at river mile 15 and experiences discharges of 745 cubic feet per second at the 10 percent flood.

Early in the plan formulation process it was determined that upstream detention is the most cost effective means of addressing the problems of flooding in Your Town. The detention basin at river mile 19 (Detention 19) proved to be the most efficient means as it was able to utilize land already owned by the non-federal sponsor and proved to require no mitigation. Detention 19 provides damage reduction in all 7 of the damage centers and has a BCR of 2.4 at the current discount rate; average annual damages reduced of \$24,960,000; average annual costs of \$10,400,000; and net average annual benefits of \$14,560,000. It is the NED Plan and provides approximately 90% reduction of damages within the study area.

CHALLENGE 5: Write a policy comment using the guidance and the report text provided.

GUIDANCE: As stated in ER 200-2-2 10 b “...the EA should include a brief discussion ... of the environmental impacts of the proposed action and alternatives...”

SAMPLE REPORT LANGUAGE:

The alternatives carried forward for final consideration were all determined to be economically justified (i.e. have annual benefits greater than the annual costs) and environmentally acceptable. Based on the “next-added increment” analysis, the alternatives were established to be economically justified in combination with each other as well as on a stand-alone basis. The alternative plan with the greatest net benefits to society was identified as the combination of the 1 percent AEP levee protecting the Jet Cell Test Facility in AOI-2, including the hydraulic mitigation for that levee, in combination with a buyout of the 25-year floodplain in NS-AOI-4. This plan is referred to in the analysis below as the Proposed Action. For purposes of compliance with the National Environmental Policy Act, the reasonably foreseeable consequences of the Proposed Action are compared and contrasted with the No Action alternative in the analysis below.

CHALLENGE 6: Write a policy comment using the guidance and the report text provided.

GUIDANCE: Implementation guidance for WRDA 2007 Section 2036 Mitigation Plans. Each recommended mitigation plan will be described in the project decision document and shall include the following:

- (1) A description of the physical action to be undertaken to achieve the mitigation objectives within the watershed in which such losses occur and, in any case in which mitigation must take place outside the watershed, a justification detailing the rationale for undertaking the mitigation outside of the watershed;
- (2) The type, amount, and characteristics of the habitat being restored;
- (3) Ecological success criteria for mitigation based on replacement of lost functions and values of the habitat, including hydrologic and vegetative characteristics. The ecological success criteria should be included in the draft feasibility report;
- (4) A plan for monitoring to determine the success of the mitigation, including the cost and duration of any monitoring and the entities responsible for any monitoring. If it is not practicable to identify the entities responsible for monitoring in the project decision document, the responsible parties will be identified in the project partnership agreement.
- (5) A contingency plan (i.e., adaptive management) for taking corrective actions in cases where monitoring demonstrates that mitigation measures are not achieving ecological success.
- (6) Should land acquisition be proposed as part of the mitigation plan, a description of the lands or interests in lands to be acquired for mitigation and the basis for a determination that such lands are available for acquisition;

SAMPLE REPORT LANGUAGE:

Lock Construction Aquatic Habitat Mitigation

Proposed plan

The District will place Large Woody Debris (LWD) in the Lock embayment.

LWD is typically defined by biologists as logs with a minimum diameter of four inches and a minimum length of six feet that protrude or lay within a stream channel. Their multiple purposes include fish habitat, channel and bank stability (in flowing streams), and biological diversity. LWD extending above the water surface also provides perching/resting habitat for birds and reptiles. Natural forms of LWD can be categorized as whole trees, logs, and root wads. Various types of engineered LWD have also been developed. The specific form or forms of LWD to be used at the Lock embayment will be developed in consultation with federal and state resource agencies.

Monitoring

Purpose is to verify success as defined in terms of the mitigation objectives and criteria developed to measure success. Full use will be made of other agencies/NGOs fish survey data to establish baseline and post-construction conditions. The Corps monitoring efforts will be fully coordinated with these other survey efforts.

The following mitigation objectives are applicable to aquatic habitat mitigation for aquatic impacts of navigation structures construction:

1. Improve aquatic habitat diversity in the Lock embayment through placement of woody structure
2. Document lessons learned and apply adaptive management for subsequent projects

Ecological Success Criteria

CHALLENGE 6 (continued):

Success will be described in terms of direct visual observations and biological survey results.

Monitoring Studies

Physical performance of the LWD will be evaluated in terms of direct visual observations of placement stability, material permanence, changes in flow and sedimentation characteristics. Biological survey in the embayment will include fish collection and observations of bird, reptile and amphibian use of the structure.

Pre-construction

Baseline fish, and bathymetry/terrain surveys

Post-construction

Visual surveys of embayment area

Fish surveys

CHALLENGE 7: Write a policy comment using the guidance and the report text provided.

GUIDANCE: ER 1165-2-130 Para 6.h.(2) Parking. Lack of sufficient parking facilities for the general public (including non-resident users) located reasonably nearby, and with reasonable public access to the project, will constitute de facto restriction on public use, thereby precluding eligibility for Federal participation. Generally, parking on free or reasonable terms should be available within a reasonable walking distance of the beach. Street parking is not considered acceptable in lieu of parking lots unless curbside capacity will accommodate the projected use demands. Parking should be sufficient to accommodate the lesser of the peak hour demand or the beach capacity. In some instances State and local plans may call for a reduction in automobile pollutants by encouraging public transportation. Thus, public transportation facilities may substitute for or complement parking facilities. However, reports which consider public transportation in this manner must indicate how the public transportation system would be adequate for the needs of projected beach users. In computing the public parking accommodations required, the beach users not requiring parking should be deducted from the design figure.

(3) Access. Reasonable public access must be provided in accordance with the recreational use objectives of the particular area. However, public use is construed to be effectively limited to within one-quarter mile from available points of public access to any particular shore. In the event public access points are not within one half mile of each other, either an item of local cooperation specifying such a requirement and public use throughout the project life must be included in project recommendations or the cost sharing must be based on private use.

SAMPLE REPORT LANGUAGE: Parking and Access. The city of Your town has approximately 2,566 public parking spots including street-side parking within a reasonable walking distance of nine different public access locations. The distance between public access points varies from one tenth to three-quarters of a mile. If only half of these parking spaces are available to beach visitors, over 5,000 daily visitors could arrive by vehicle at each city, assuming a turnover rate of two spaces per day. This exceeds the current and anticipated future demand.

The study area is also serviced by regular public transit. Buses travel up and down the coastline (north-south) making stops near public access points 28-31 times every day. Buses traveling between the study area and inland communities make between one and two dozen stops daily with limited service on weekends. The study area is also serviced by commuter rail service. The commuter rail makes stops within two to three blocks of the two most popular public access points within the study area. In addition many individuals have been observed bicycling to the study area beaches and several thousand residents and visitors in the study area reside or stay within walking distance of public access points.

In sum the amount of parking is adequate to meet current and future peak demands, parking is located within reasonable walking distances from the access points, and if also taking into consideration visitation that is supported by modes other than car (buses, walking, bicycling, train), there is ample parking and other infrastructure to support projected recreation demand.

PCoP Workshop 2015
Session A-3. How to write and respond to comments.
ANSWER KEY

CHALLENGE 1: The report identifies the National Economic Development (NED) Plan as Alternative E because it maximizes nominal net NED benefits. However, Alternative E only has \$430,000 more net benefits than Alternative D but costs an additional \$18M to implement. ER 1105-2-100 Exhibit G-1. 3.c. states that, “Where two cost-effective plans produce no significantly different levels of net benefits, the less costly plan is to be the NED plan, even though the level of outputs may be less.” Based on the findings of the analysis presented and the cited policy, it appears that Alternative D is the alternative that reasonably maximizes net NED benefits and should be identified as the NED Plan. In order to recommend Alternative E, either demonstration that it does provide significance above Alternative D must be demonstrated or a waiver for a locally preferred plan (LPP) may need to be obtained from the ASA(CW). This issue should be discussed with the vertical team as soon as possible to identify and document a path forward.

CHALLENGE 2: The report text identifies ~\$195M in mitigation costs for induced flooding and recommends that it should be fully cost shared. USACE policy for cost sharing induced damaged mitigation is outlined in ER 1105-2-100 Paragraph 3-3. b.(5). Since the mitigation is not economically justified and analysis showed it does not rise to a real estate taking, this cost should not be a Federal cost shared feature of the recommended plan. Thus, both the project first cost and the Federal share are over estimated in the report. The report should be revised to continue to document the NFIP required mitigation costs, but remove them from the project first cost and identify them as a sole non-federal sponsor cost.

CHALLENGE 3: The report text identifies the base plan for disposal as Ocean Disposal, even though Bay disposal is the cheapest. The rationale for this determination is a state law prohibiting bay disposal. 33 CFR Sec 335.7 identifies the, “Federal standard means the dredged material disposal alternative or alternatives identified by the Corps which represent the least costly alternatives consistent with sound engineering practices and meeting the environmental standards established by the 404(b)(1) evaluation process or ocean dumping criteria.” Because bay disposal does not violate any Federal laws and is the least cost feasible alternative that should be the base plan for disposal cost share. If the sponsor must go to ocean disposal to meet the state standard, that is noted to be more stringent than Federal requirements, the sponsor would have to pay the incremental cost above the bay disposal plan. The report and recommendation should be revised accordingly.

CHALLENGE 4: The report text states, “Detention 19 provides damage reduction in all 7 of the damage centers and has a BCR of 2.4 at the current discount rate...” USACE policy establishes minimum flow requirements as those downstream of an 800 cfs discharge for a 10 percent flood (see ER 1105-2-100 Para 3-3. b. (6)). Typically this is demonstrated by documenting that the plan and any separable elements thereof are justified using only benefits that meet the minimum flow requirements. In this case, the plan and any separable elements should be justified based on benefits limited to the six damage centers that meet the minimum criteria. Once justification is established, all benefits can be counted in the project BCR, including those that do not meet the

minimum requirement. If the plan is no longer justified when removing benefits that do not meet the minimum criteria, then the plan cannot be recommended for USACE cost share. In either event, the report will need to be revised to properly display that the plan meets the minimum flow criteria.

CHALLENGE 5: Only the environmental effects of the proposed plan and the no-action alternative are discussed. It is likely that the alternatives in the final array have different environmental consequences between them. As stated in ER 200-2-2 10 b "...the EA should include a brief discussion ... of the environmental impacts of the proposed action and alternatives..." Enough information should be included on the alternatives in the final array to show that either the alternative chosen was the least environmentally damaging, minimized environmental impacts, or that there was not a significant difference between them. Obviously, since it is an EA, a FONSI is the result, so the alternative being chosen has been determined to not cause significant effects, but the public (and reviewers) should be able to see/understand how we got there.

CHALLENGE 6: The report text is not sufficient to document the proposed mitigation monitoring. All details of the mitigation, including monitoring, specific success criteria and adaptive management must be in the report. Specifically, the concern is that the mitigation is not defined (e.g. number of structures, placement, land required, etc.) Further, the success criteria are not specific and the monitoring is not tied to success criteria and adaptive management is not identified or tied to monitoring/success criteria (see Implementation guidance for WRDA 2007 Section 2036 Mitigation Plans). Please revise the report accordingly.

CHALLENGE 7: The study documents the availability of access points and parking allowing for full cost-sharing. However it cites parking locations with distances up to 3/4 of a mile away from some access points. It is USACE policy, per ER 1165-2-130, that parking within 1/4 mile in either direction of a public access point is considered reasonable for full Federal cost sharing. Further justification is needed to support cost sharing for reaches that do not meet this policy or revisions to cost share will have to be made.