Determination of Effects:
Under the ESA[1] Section 7(a)(2), each Federal agency shall ensure that any action authorized, funded, or carried out by such agency (hereinafter referred to as an "action agency") is not likely to jeopardize the continued existence of any endangered or threatened species, or destroy/adversely modify designated critical habitat, and as such is responsible for making one of the following effects determinations, as described in the ESA Section 7 Consultation Handbook[2]:

- No Effect (see Notes on Pages 3-4):
  - The appropriate determination when the proposed action will have no effect on listed species or designated critical habitat. For this determination, the effects of the action should be temporally or spatially separated from the listed species.
  - This determination is made by the action agency and does not require concurrence from NMFS; however, NMFS can provide technical assistance to agencies in reaching this determination.

- May Affect, but Not Likely to Adversely Affect (see Notes on Pages 3-4):
  - The appropriate determination when the effects of the action on listed species or critical habitat will be discountable, insignificant, or wholly beneficial (see Informal Consultation, next page).
  - In order to receive concurrence with this determination, the action agency must initiate informal Section 7 consultation. When the information indicates that the action has no likelihood of adverse effect, NMFS will provide a letter of concurrence, which completes informal consultation.

- Likely to Adversely Affect (see Notes on Pages 3-4):
  - The appropriate determination if any adverse effects on listed species or designated critical habitat may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or beneficial. Also the appropriate determination if any "take" of listed species will occur.
  - Initiation of formal Section 7 consultation is required and NMFS is responsible for completing a biological opinion on the proposed action (and may issue an incidental take statement).

Informal Consultation:
NMFS's justification for its concurrence with a "May Affect, but Not Likely to Adversely Affect" determination is based on three determinations of effects, as stated in the ESA Section 7 Consultation Handbook:

- Insignificant effects – relate to the magnitude of the impact: the effects cannot be meaningfully detected, measured, or evaluated, and should never reach the scale where a "take" occurs.
- Discountable effects – relate to the likelihood of the impact: the effects are extremely unlikely to occur.
- Beneficial effects – positive effects without any adverse effects.

[1] The Endangered Species Act of 1973: www.nmfs.noaa.gov/pr/pdfs/laws/esa.pdf
[2] The ESA Section 7 Consultation Handbook: www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf

Formal Consultation:
NMFS considers any action that is likely to result in the incidental take of a listed species, or in adverse effects on designated critical habitat, to be "Likely to Adversely Affect" the species, thereby requiring formal consultation and a biological opinion:

- Take is defined in the ESA Statute (section 3(19)) as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct".
- Adverse effects on designated critical habitat are not defined in the ESA Statute, the ESA Section 7 implementing regulations, or the ESA Section 7 Handbook. See "Notes on ESA Section 7 Effects Determinations" on Pages 3-4 for guidance with this determination.

For any consultation, implementation of monitoring, conservation measures, and best management practices are an important component in ensuring that impacts are minimized. For example:

1. A survey of the project area should be performed just prior to commencement or resumption of activity to ensure that no listed species are in the project area. If a listed species is detected, activities with potential to affect the animals should be postponed until the animals voluntarily leave the area. If a listed species enters the area during the conduct of activities, all activities with potential to affect the animals should cease until the animals voluntarily depart.
2. Project-specific conservation measures should be identified and implemented where applicable. For example, if a particular component of the action has the potential to disturb or harm a listed species, then specific measures to reduce or eliminate those impacts must be in place and described in detail.
3. All project personnel that may potentially interact with listed species in the action area must be informed of the species' status, the protections afforded under Federal laws, and of project specific measures to be taken to reduce impacts on those species. An overview of the laws and guidelines for listed species in Hawaii, American Samoa, the Commonwealth of the Northern Mariana Islands, and Guam may be downloaded at www.nmfs.noaa.gov/pr/education/hawaii/.

Please send consultation initiation and concurrence requests to: Ann Garrett, Assistant Regional Administrator; Protected Resources Division; NMFS Pacific Islands Regional Office; 1845 Wasp Boulevard, Building 176; Honolulu, Hawaii 96818.

If you have any questions regarding the ESA Section 7 consultation process, please contact the following Protected Resources staff: Pat Opay at 808-725-5140 or Patrick.Opay@noaa.gov.

ESA Section 7 Effects Determinations:

"No Effect"

"May Affect, But Not Likely to Adversely Affect"

"May Affect, And Likely to Adversely Affect"

Introduction

1. To defensibly conclude that an action has "no effect" or "may affect, but is not likely to adversely affect" an ESA-listed marine species, an agency would have to build an argument based on the following four propositions:

    A. The Action *is not likely* to produce potential stressors or subsidies that would reasonably be expected to act directly on individual organisms or to have direct or indirect consequences (positive or negative) on the environment;

    B. If **not A** [that is, *the Action is likely to produce those potential stressors*...], endangered or threatened individuals *are not likely to be exposed* to one or more of those potential stressors or subsidies or one or more of the Action's direct or indirect consequences on the environment;

    C. If **not B** [that is, *listed individuals are likely to be exposed*...], those listed individuals *are not likely to respond*, positively or negatively, to that exposure;

    D. If **not C** [that is, *listed individuals are likely to respond*...], those responses *are not likely to be sufficient to reduce their individual performance*.

2. Two outcomes would justify a "no effect" determination:

    2.1. If an agency accepts Proposition A as true (more likely to be true than false, based on the evidence available) and can defend that acceptance as based on all of the relevant evidence available and the appropriate background, the agency is justified in a "no effect" determination.

    2.2. If an agency rejects Proposition A as false (more likely to be false than true, based on the evidence available), but concludes that Proposition B is true because listed resources have no possibility of being exposed to stressors or subsidies produced by the action (a 0.0 probability of listed individuals being exposed) and can defend that conclusion based on all of the relevant evidence available and the appropriate background, the agency is also justified in a "no effect" determination.

3. Four outcomes would justify a “may affect, but not likely to adversely affect” determination:

   3.1. If an agency rejects Proposition A as false and accepts Proposition B as true (the action produces stressor or subsidies, but the probability of exposing listed individuals to those stressors is so small that it would not be reasonable to expect them to occur) and can defend that acceptance based on all of the relevant evidence available and the appropriate background, the agency is justified in a “may affect, but not likely to adversely affect” determination (because the probability of effects would be discountable).

   3.2. If an agency rejects Proposition A and B as false but accepts Proposition C as true (the action produces stressors or subsidies, listed individuals are likely to be exposed to those stressors or subsidies, but there is no possibility or only a small probability of those individuals responding to the exposure) and can defend that conclusion based on all of the relevant evidence available and the appropriate background, the agency is also justified in a “may affect, but not likely to adversely affect” determination (because the effects would be insignificant).

   3.3. If an agency rejects Proposition A, B, and C as false (the action produces stressors or subsidies, listed individuals are likely to be exposed to those stressors or subsidies, and listed individuals are likely to respond to that exposure), but concludes that listed resources have (a) no possibility of negative responses and (b) are likely to respond positively to the exposure and can defend that conclusion based on all of the relevant evidence available and the appropriate background, the agency is justified in a “may affect, but not likely to adversely affect” determination (because the effects would be entirely beneficial).

   3.4. If an agency rejects Proposition A, B, and C as false but accepts Proposition D as true (the action produces stressors or subsidies, listed individuals are likely to be exposed to and respond to those stressors or subsidies, but there is no possibility or only a small probability of those individuals experiencing a reduction in fitness as a result) and can defend that conclusion based on all of the relevant evidence available and the appropriate background, the agency is also justified in a “may affect, but not likely to adversely affect” determination (because the effects would be insignificant).

4. If an agency rejects Proposition A, B, C, and D as false (or cannot accept them as true) given all of the relevant evidence available and the appropriate background, the agency is justified in a “may affect, and likely to adversely affect” determination.