

## ESA Overview Module 4 – Section 7, Interagency Consultation Text

### Section 7(a)(2) Action Area (slides 18 – 24)

#### Action Area

Previously, we discussed evaluating the action area of the proposed project. Many times we think of the action area as simply the area immediately impacted by the project. However, the action area is - **all areas** affected directly or indirectly by the Federal action. The action area can be larger than the impacted area and it could be miles apart and it may include areas outside the Federal agency's control. To complicate matters even more, the species may or may not even occur there.

The next few slides provide examples of action areas.

As stated in the definition of the action area, the species may or may not occur there. In this case, it looks like no species are present, leading to a very short "no effect" section 7 analysis. But let's define some terms identified in this slide.

**Direct effects** are those effects that are caused by the action and occur in the same time and place as the action. This is often referred to as the "project footprint". An example of this might be the installation of a new culvert under a bridge that may fill in shoal habitat important to listed fish.

**Indirect effects** are those effects that are caused by or will result from the proposed action and are later in time but still reasonably certain to occur. Often, a project can have off-site effects, such as long-term ground disturbance, clear cuts or new road construction. Removal of vegetation for the construction of a new bridge over a stream results in exposed ground. Over time, the sediment erosion that results may cause impacts to in-stream habitat that is important to listed fish.

Here is a depiction of what we may think is the Action Area. In this case, the range of the species is larger than the effects of the project.

For example: the action is military training resulting in a lot of noise and smoke in red-cockaded woodpecker habitat. The red-cockaded woodpecker is a listed bird and may be affected. In this illustration, the area affected by the smoke and noise is smaller than the range of the woodpecker. Another scenario might be construction in a river such that the forest borders are removed causing the water temperature to increase. A listed fish species occurring in the river downstream of the action might be affected by the increased temperature but only a portion of the species range is within the action area.

In our final example of an Action Area, the effects of the action are expected to encompass the range of a species. There are direct and indirect effects of the action; all of which would need to be assessed to determine the species' exposure and response to those effects.

An example of an action may be a prescribed fire in a forested area. The direct effects will be to the part of the action area – burned vegetation, scorched soil in some particularly hot areas. Indirect effects could include the smoke that moves through the burn site. Indirect effects could also include ash and silt flowing into a stream following a rainstorm due to the lower quantity of vegetation covering the hillsides. Those stressors could affect water quality which affects fish, freshwater mussels, and invertebrates living in the stream.

These examples involved only one species. The process would be the same for multiple species.

There a couple of more types of effects we need to discuss: cumulative effects and the effects of interrelated and interdependent actions. The cumulative effects used in the Endangered Species Act are different than the cumulative effects you may be familiar with in a National Environmental Policy Act or (NEPA) document. Cumulative effects in the context of the Endangered Species Act pertain to non-Federal actions, and are reasonably certain to occur in the action area.

For example a section of state land, although currently undeveloped, is identified in state planning documents for residential development. Although undeveloped now, the future sale and development of this land is reasonably certain to occur. The Endangered Species Act section 7 cumulative effects only deals with non-Federal actions ... because Federal actions are subject to section 7 consultation.

In NEPA cumulative effects are concerned with past, present and future actions ,and are not limited to only non-Federal actions and are expected to occur in the reasonably foreseeable future.

Consideration of all the effects of an action may also include assessing other actions – those that are prompted by the larger action being consulted on. There are two types:

Interrelated Actions – are part of a larger action and depend on the larger action for their justification. For example, a renewable energy plant is being constructed, but a transmission line needs to be built to transport the power generated at the plant for use elsewhere. The construction of the transmission line is an interrelated action because if it weren't for the energy plant, there would be no need for the transmission line.

Interdependent Actions have no independent utility apart from the action under consideration. For example, an existing dam, used for hydropower, needs upgrading to increase power generation. The upgrade will include the addition of a turbine, which is the proposed action. The addition of the turbine is independent of the existence of the dam because the dam functions (generates power), as is, without the addition of the turbine.

Ultimately, it is not essential to give the proper name to the type of action or effect; it is essential, however that all the effects of an action be considered.

Now that we've covered the action area and associated effects and actions, let's discuss how an action agency determines if their project will affect a listed species or critical habitat.