Restoration Planning Working Group

EXXON VALDEZ OIL SPILL RESTORATION OFFICE 645 "G" Street Anchorage, Alaska 99501

DATE:

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Chris Swenson سے کئے FROM: Veronica Gilbert Bob Loeffler

Carol Gorbics

Karen Klinge

TO:

SUBJECT: Restoration Objectives for Commercial Fishing

After spending a day trying to write restoration objectives for commercial fishing, we decided that they all dealt with recovery of commercial fish species. Consequently, we recommend that the draft plan contain no restoration objectives for commercial fishing. Instead, we recommend addressing this service exclusively by restoring the resources that depend on them.

We have included in this memo the restoration objectives we developed for commercial fishing so you could decide for yourselves whether they are appropriate and better addressed through recovery plans for commercial fish species.

Sockeye Salmon

- 1. Increase the productivity of the Kenai River system and Red Lake system for sockeye salmon.
- 2. Replace the loss of fishing opportunities in Kenai River system and Red Lake system.

Pink Salmon

1. Increase smolt production in and returns to wild pink salmon streams.

All Commercial Fish Species

- 1. Protect spawning and rearing habitat throughout the spill area.
- 2. Assess damage to commercial fish species. Specific concerns this damage assessment program should address include:
 - Determine if overescapement or loss of spawning habitat due to the oil spill is decreasing the productivity of the Chignik Lake Black Lake systems.

- Document and explain the extent and effect of continuing egg mortality.
- What effect, if any, has resulted from increased commercial fishing pressure on rockfish as a result of fishery closures after the spill?
- Analyze 1993 data to further document injury to the 1989 year class of herring.
- Were reduced populations of spot shrimp since 1989 due to the oil spill?
- 3. Understand the processes that drive the ecosystem on which commercial fishing depends, natural variations in commercial fish species, and species interactions. Specific concerns this monitoring program should address include:
 - What is the extent and effect of hatchery straying on genetic mix of wild pink salmon stocks?
 - How do food fish affect the size of commercial fish populations?

Attached is a list of suggestions about writing objectives.

Attachment (1)

Suggestions for writing objectives.

1. An objective is a specific, preferably measurable, statement of what we expect to achieve in order to restore an injured resource or service. An objective is created by looking at the problems we need to solve. There are three concepts that are a part-of or nearby this concept.

- the objective is what we want to achieve.
- the endpoint is when we know we have achieved the objective.

• the measurement techniques is how we *measure* whether we have achieved the objective. The three concepts are different and we want to keep them straight in our mind, so we know when we are talking about each one.

2. An objective is *not* an option or a project. For that reason, if you think you have written a convoluted version of an option or project, go back to the problem that you want to solve.