CHAPTER 5: STEWARDSHIP PROCESS

Decision-Making Process

Introduction

This decision-making process is based on the following concepts:

- Desirable management activities are those that create conditions that will sustain natural processes.
- Passive management approaches that can solve a problem or condition within a time frame that does not place the ecosystem at unacceptable risk are preferred.
- Active management approaches will only be used when passive approaches will likely not be effective within an acceptable timeframe and where the active approach will create conditions that will sustain natural processes.
- In cases of uncertainty, default decisions will be made in the direction that favors native trout.

This process is intended as a guide to maintain consistency with the mission statement by a group of stakeholders having widely differing points of view. The process should facilitate problem solving, maintain a positive working relationship, and provide documentation of the logic behind decisions.

This document uses a dichotomous key to assist in developing proposals that are consistent with the mission statement, as shown in Figure 21. The guidelines and questions assist the proponent in developing a written proposal for the activity. Once a proposal is developed it is reviewed by the committee for consensus and implementation. The process is intended to funnel wide ranging proposals into a clearly identified condition and then into a specific activity.

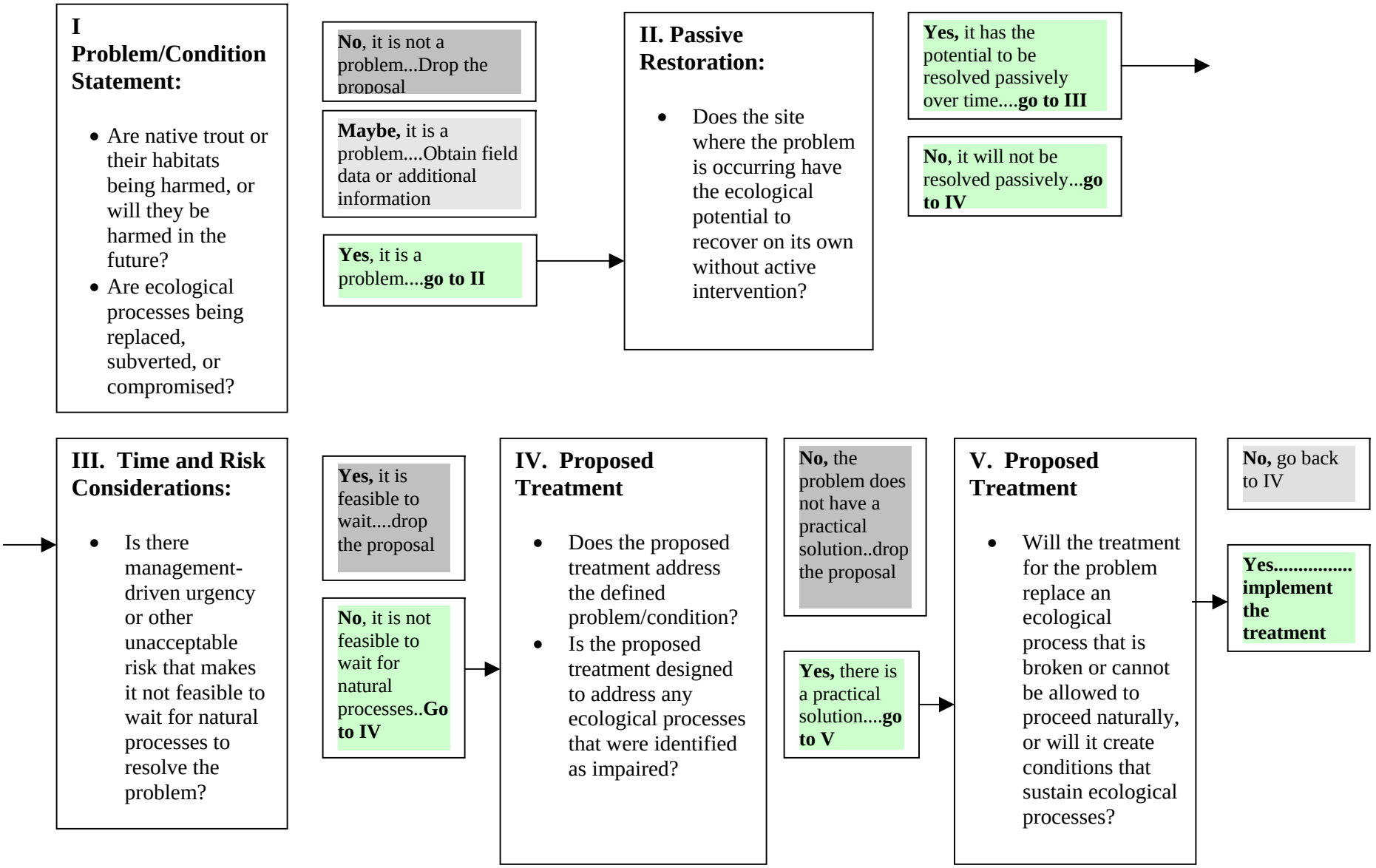
Some activities will be a part of the Management Plan and therefore will be prescribed in advance (see Chapter 6). Other activities will be generated spontaneously and require review by the committee. After the condition is agreed upon, and taken through the protocol, the second step is to choose the best method of treatment. No treatment methods are summarily excluded. Each method must be evaluated in terms of the condition it is treating.

Defining a Proposal

A proposal must be stated in the form of a problem/condition that includes a specific measurable management objective and the ecological process(es) that is/are linked to the management objective. The initial proposal should not contain methods.

A proposed treatment should both address the defined problem/condition and be designed to address any ecological processes that were identified as impaired or subject to improvement.

Figure 21. Decision Tree for Management Actions on the Elk Creek Conservation Area



Example

The following example illustrates how one would use the decision-making outline to present a proposal and evaluate it.

In this example, accelerated bank erosion is taking place on a segment of Elk Creek. While bank erosion and channel migration are ecological processes, the rate of erosion *appears* to be accelerated beyond natural rates. The high rate of erosion is probably the result of insufficient bank vegetation because of past logging activities and possibly other disturbances, including fire. In addition, an upstream logjam appears to be deflecting high to intermediate flows towards the exposed bank, possibly accelerating bank erosion.

Vegetation is not re-establishing along the streambank because the short-term site potential has shifted from one that is suitable for growing conifers to one that is best suited to growing grasses and low shrubs. The management objective is to reduce the rate of streambank erosion to less than average x feet per year within x years.

The term "appear" is frequently used in the following description because this proposal is based on subjective rather than quantitative information. It will be the responsibility of the committee to determine when subjective evaluations are insufficient and when empirical data are required.

I. Problem/condition statement: A high rate of bank erosion is occurring in a specific portion of Elk Creek. This erosion is likely the result of insufficient bank vegetation because of past logging activities. While bank erosion and channel migration are ecological processes, the rate of erosion *appears* to be accelerated beyond natural rates.

Yes, this is a problem. Bull trout habitat is being degraded by changes in channel dimension, reductions in shade, and increases in fine sediment to a degree outside the range of natural variability. While wood jams in streams are a natural channel forming process, the successional ecology of the associated riparian vegetation *appears* to have been impaired by past logging practices.

Fire, like timber harvest, often removes riparian vegetation, leaving streambanks denuded of vegetation. So, why would this erosion rate be considered above the range of natural variability? It *appears* that the method of harvest has resulted in a modified site condition and a sod mat that is currently precluding the establishment of woody vegetation. Under these conditions, extensive time is required to change the site condition to make it suitable for establishment of woody vegetation.

Yes, this is a problem……go to II

II. Passive restoration: This condition would likely resolve passively, as the channel will migrate to locations with adequate bank vegetation, or sufficient vegetation will become established on the existing bank to reduce the rate of erosion to within the range of natural variability.

However, given the length of time since the past logging activity and because the riparian zone is composed of grasses and rotting stumps it *appears* that the natural succession processes would not reestablish woody bank vegetation in the foreseeable future.

As indicated in the problem statement, there is not enough data to conclusively state that the natural succession process is impaired. It *appears* to be impaired because of the amount of time since the last logging entry.

Yes, it has the potential to be resolved passively over time.....go to III

III. Time and risk considerations: Even if we assume natural succession rates, considerable erosion could occur with each spring flood event. A large flood event prior to vegetation establishment could cause considerable erosion if the log jam does not move with the flood.

It is hard to predict what might happen without intervention because it is hard to assess the longevity of the log jam and magnitude of flooding events. Active intervention here will have no measurable impact, and passive restoration would result in continued and excessive bank erosion and sedimentation. Therefore, in balance it is desirable to act soon on this problem.

No, it is not feasible to wait for natural processes……go to IV.

IV. Proposed Treatment: Weaken the woody debris jam and plant woody vegetation on the raw bank. The basic problem is the deflection of high flows by a debris jam into a highly erosive stream bank. We propose to use chainsaws to weaken the debris jam so that in the next "high" flow event the debris will dislodge and move downstream. In addition, we propose to plant vegetation on the poorly vegetated bank. Finally we recommend collecting more data on the local streamside area here to understand why the woody riparian vegetation was not able to re-establish itself following the timber harvest.

There is a practical solution…..…go to V

V. Compatibility of Treatment with Ecological Processes: The proposed treatment will create conditions that bring the rate of bank erosion within the range of natural variability by reducing stress on the bank through the weakening of the debris jam, and by strengthening the bank integrity through the planting of riparian vegetation.

Yes,……Implement the treatment

Management Committee

A five-member Management Committee will oversee decisions about management of the Elk Creek Conservation Area. Two appointments to the committee will be made by the SEC Board of Directors and two by the CSKT Natural Resources Department. SEC and CSKT each will set terms for their respective representatives. These appointments will be made by January 1, 2008. One at-large person will be appointed to the committee by these four individuals, who will set the term for the fifth member. The committee will meet in January 2008 and make its first report to SEC and CSKT by March 1, 2008.

On a project-by-project basis, the five-person Management Committee is mandated to consult with qualified experts from relevant agencies or universities outside SEC and CSKT in order to obtain unbiased technical opinions on which to base decisions.

Any revenue that may be generated from the management of the Elk Creek Conservation Area will align with property ownership. Any revenues generated from the east half

will be returned to BPA. Revenues generated from the west half will be available for sustainable management of the conservation area and other resource conservation projects.

The Management Committee will decide how often it needs to meet and determine other organizational details. It will strive to work by consensus; when consensus is not possible, a majority vote will be required for making decisions.

Recognizing that the Memoranda of Agreement and Conservation Easements are restrictive, the management committee is charged with initiating actions that are exceptions to, but complement, these documents.

The Management Committee will decide when, if, and how it becomes necessary to hire staff, for instance an Ecosystem Steward. If an Ecosystem Steward is appointed, he/she would meet regularly with the Management Committee and annually with the SEC Board and CSKT's Fish, Wildlife, Recreation and Conservation Division.
The management committee will review the management plan at regular yearly