5.2 Types of Effects (Impacts)

In this PDEA, SMUD has followed a stepwise approach to identifying and assessing potential effects of the Proposed Action and alternatives. As described above in Section 5.0, the effects consist of the difference between the Proposed Action or alternative as compared to the baseline environmental conditions. In this case, the circumstances that comprise the baseline environmental conditions are the same circumstances that comprise the Affected Environment and would result from implementation of the No Action Alternative. Thus, each of the resource-specific subsections in Chapter 5.3 begins with a discussion of the Affected Environment. This general approach, shown graphically in Figure 5.2-1 and described below, will be used throughout this PDEA.

5.2.1 Step 1 – Determine Whether the Proposed Action or an Alternative Will Affect a Resource

SMUD determined whether the Proposed Action or an alternative would affect a particular resource's baseline environmental conditions. Such a conclusion was supported by substantial evidence (i.e. facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts) in the record.

5.2.2 Step 2 – Determine Level of Significance

For each identified potential effect, SMUD determined if the effect would result in an insignificant or significant effect to the resource. To do so, SMUD compared the effect of the Proposed Action against the baseline, the condition of each resource if the project were to continue operating under the existing FERC license. If that comparison demonstrated that the Proposed Action would cause a negative effect on the resource at issue, SMUD determined whether the negative effect was significant by analyzing whether the effect would cause the resource not to be inconsistent with applicable standards, such as the Basin Plan in the context of water quality. If it did, the effect was considered significant.

SMUD applied three levels of significance: 1) if the negative effect was so minor as to not cause a resource to be inconsistent with applicable standards, the effect was considered "Less-Than-Significant Prior to Mitigation;" 2) if an effect caused a resource not to be consistent with applicable standards, but could be mitigated so that it was consistent with the applicable standards, it was considered "Less-Than-Significant with Mitigation Incorporated;" and 3) if an effect caused the resource to be inconsistent with applicable standards, and could not be mitigated to alleviate that inconsistency, the effect was considered "Significant and Unavoidable."

The three levels of significance used by SMUD are:

- *Less-than-Significant*– An effect that is considered not significant without any mitigation.
- *Less-than-Significant Effect with Mitigation Incorporated* – A project effect that requires mitigation to reduce the effect to less-than-significant.

- *Significant and Unavoidable* – A project effect that could be significant, and for which no feasible mitigation or alternative has been identified.

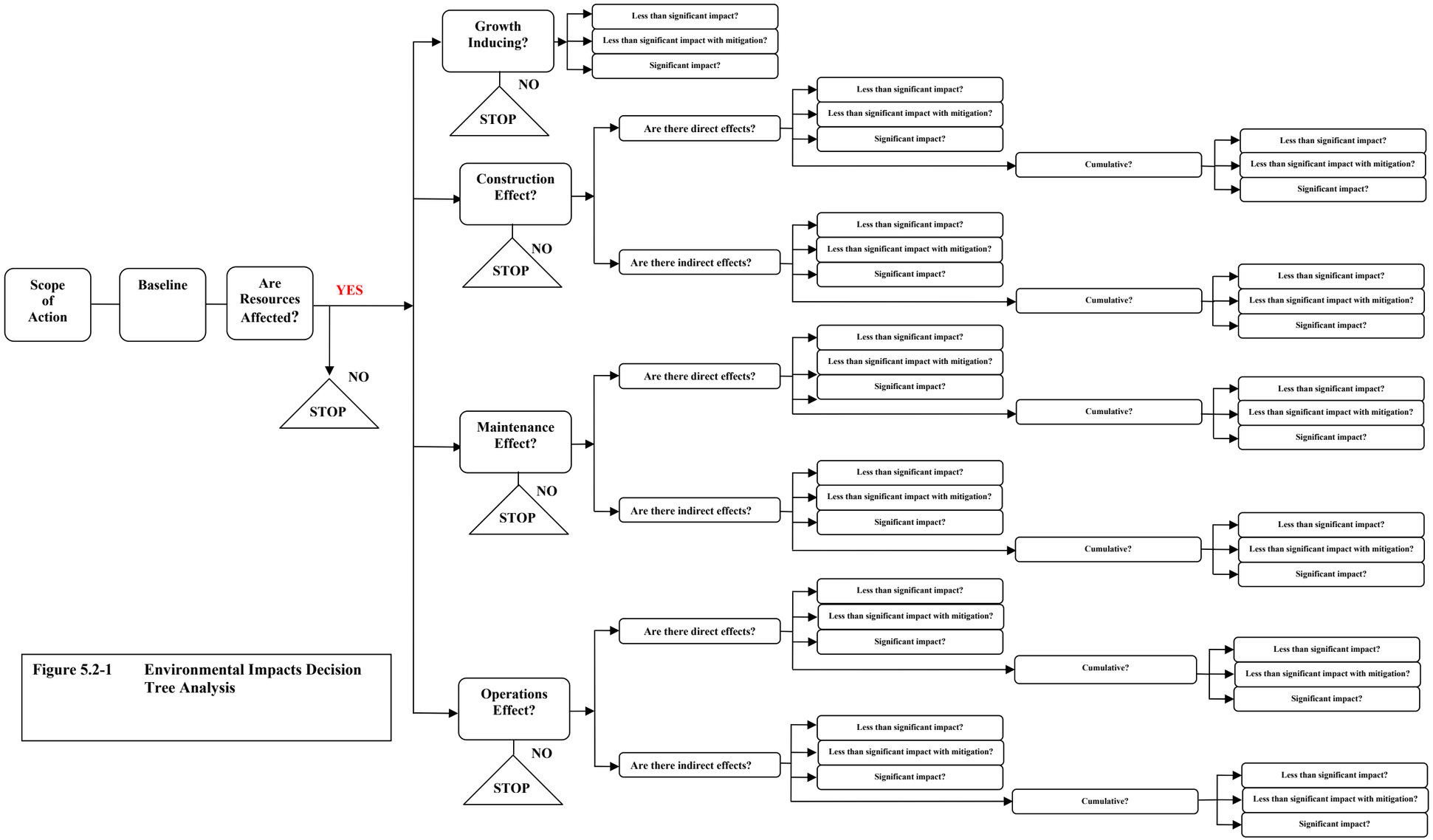

Figure 5.2-1 Environmental Impacts Decision Tree Analysis