

## R2. Problems to Be Addressed

Specific Problem(s)	Root Cause(s) of the Problem
<ul style="list-style-type: none"> <li>• <b><i>In 2002, Sitka Center for Art and Ecology Board of Directors made a commitment to attempt to balance the ecology part of their mission with the art part.</i></b></li> </ul>	<p>Sitka has excelled in developing art workshop and residency programs. However, if their namesake describes a “center for art and ecology”, <b>they needed a stronger ecology component in their organization.</b></p>
<ul style="list-style-type: none"> <li>• <b><i>Lack of trust and misunderstanding of the Crowley Creek Collaborations’s objectives caused local landowners to deny access to their land for research and refuse participation in restoration.</i></b></li> </ul>	<p><b>Many of the homeowners and local entities found the mission of the CCC overly philosophical; the specific outcomes, timeline, and budget were unclear.</b> The first phase of the CCC was intended to be an interdisciplinary exploration and <b>freedom to inquire</b> was needed in order to gain a holistic inventory of the values, opportunities, and constraints of the site before making any assumptions about the outcomes.</p>
<ul style="list-style-type: none"> <li>• <b><i>Lack of coho-spawning gravels in lower reach.</i></b></li> </ul>	<p><b>The water intake system that supplies Sitka Center and Cascade Head Ranch is trapping the gravels</b> that would otherwise erode from the basalt headlands and travel downstream to settle, composing the structure of the lower streambed.</p>
<ul style="list-style-type: none"> <li>• <b><i>Confined stream, headcutting, disconnection from floodplain and wetlands, and altered groundwater retention.</i></b></li> </ul>	<p><b>To maximize pastureland during the agricultural era and to protect the road, the creekbed was sometimes dug out with a tractor or by hand. The stream material was then used to fortify embankments, or dikes, along Crowley Creek.</b></p>
<ul style="list-style-type: none"> <li>• <b><i>Crowley Creek lacks complexity. Re-establishing complexity in the meadow would increase the likeliness of flooding Three Rocks Rd.—the singular access road to 72 homes and Sitka Center.</i></b></li> </ul>	<p><b>During the winter storms, when torrents of sediment-laden water reaches the McKee Commons, it is restricted to the small channel under the bridge, and virtually stopped “in its tracks” by the high water level in the estuary. At that point it dumps its sediment load, clogging the channel. Water then spreads out across the meadow, inundating everything, including the road.</b></p>
<ul style="list-style-type: none"> <li>• <b><i>Truncation of tidal flow and disconnection of Crowley Creek from associated tidal wetlands.</i></b></li> </ul>	<p><b>Dikes impede dispersal of tidal flows and reduce the ability to restore tidal marsh habitat.</b> Drainage ditches rapidly remove water from the salt marsh altering the groundwater regime and thus the plant associations that would develop under a more hydrated (and saline) condition.</p>
<ul style="list-style-type: none"> <li>• <b><i>A large portion of the stream lacks adequate shade.</i></b></li> </ul>	<p><b>Much of the native vegetation has been slowly removed, probably by landowners.</b></p>
<ul style="list-style-type: none"> <li>• <b><i>As natural resources are depleted so are local jobs.</i></b></li> <li>• <b><i>Stress on local ecosystem services, especially clean, reliable water in the summer months. Low flow during the dry season creates high stream temperatures.</i></b></li> </ul>	<p><b>Recent past economy, prior to tourism, relied heavily upon unsustainable resource extraction and agriculture.</b></p> <p>In recent decades, a wave of immigrants has brought money to purchase or build retreats and retirement homes. <b>The money helps the local economy, but the new arrivals further stress the ecosystem.</b></p>
<ul style="list-style-type: none"> <li>• <b><i>How do we decide if there are any ecologically and socially appropriate alterations to the land for use with our current set of values? What, if anything, must be compromised to implement these values upon the land?</i></b></li> </ul>	<p>Crowley Creek and the meadow appears and functions as it is today due to the way it has been used in the past. <b>Presently, the McKee Meadow is “open space”, a designation that comes a management plan for wildlife habitat. There is also a conservation easement prohibiting any alteration to the existing landform or addition of structures or trails. The landowner has given Sitka Center an easement for the purpose of education.</b></p>
<ul style="list-style-type: none"> <li>• <b><i>Local schools need support from the community to provide adequate resources, staff, and experiences needed for quality curriculum. The proposed CCC education program could fulfill this need.</i></b></li> </ul>	<p><b>Recent budget cuts have resulted in minimized staff and programs to implement new education requirements for integrated, real world, career-based learning experiences for high school students. Economically disadvantaged/rural schools struggle to overcome this situation.</b></p>