10c. Consideration of Pine Hill Road Bridge Replacement Project Resolution and Permit
Existing Bridge

- Three span.
- 63 ft long, 20 ft wide.
- Timber stringer structure with concrete deck.
- Structurally deficient - rot and vertical cracking.
Proposed Bridge

• Single span.
• 80 ft long, 30 ft wide.
• Precast Concrete.
Bridge Construction

- One season.
- No falsework needed (pre-cast bridge).
- Build cofferdam – dewatering.
- Remove bridge and piers. Piers will be broken off below mud line.
- Drive sheet pile and steel pipe piles.
- Install clear-span bridge.
Other Project Components

• Shoulder widening.
• Relocate water line currently attached to bridge using direction drilling under the slough.
Sea Level Rise / Flooding

- Soffit is lower than existing bridge, but water capacity is greater (wider channel and no piers in slough).
- Bridge designed so it can be raised to accommodate sea level rise.
- Bridge not accessible at high water conditions.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Lowest Bridge Soffit Elevation (ft*)</th>
<th>Water Surface Elevation (ft*)</th>
<th>Available Freeboard (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td>9.3</td>
<td>11.5</td>
<td>-2.2</td>
</tr>
<tr>
<td>Proposed</td>
<td>8.9</td>
<td>11.5</td>
<td>-2.6</td>
</tr>
</tbody>
</table>

Note: * The elevations reference the North American Vertical Datum of 1988 (NAVD 88)
Environmental Considerations

1. Biology
   a. Full span bridge.
   b. Work windows and fish relocation to minimize fish impacts.
   c. Replacement of impacted sensitive plants species (Lyngbye’s sedge) and riparian habitat.
   d. Nesting bird protection.

2. Erosion control.


4. Air quality / dust control.

5. Cultural resource surveys.
Staff Recommendations

1. Adopt Resolution 2020-03 which establishes findings relative to the application by the County of Humboldt for the Pine Hill Road Bridge Replacement Project.

2. Grant Permit 2020-01 to the County of Humboldt for the Pine Hill Road Bridge Replacement Project.