

6.3.5 Strategies and Actions for the Mid-South Coast Stratum

Mid-South Coast Stratum for Oregon Coast Coho Salmon

Independent Populations: Coos, Coquille, Floras/New, and Sixes

Dependent Populations: Johnson and Twomile

Current Status: Moderate level of certainty that the Mid-South Coast Stratum is sustainable

Primary Limiting Factor: Stream complexity (all Mid-South Coast Stratum independent populations)

Secondary Limiting Factors: Water quality (all Mid-South Coast Stratum independent populations)

Recovery Strategy for the Mid-South Coast Stratum

The basic recovery strategy for coho salmon populations in the Mid-South Coast Stratum aims to protect freshwater and estuarine reaches that currently contain high quality habitat, and restore reaches with potential for additional high quality habitat. Actions will particularly focus on increasing the amount and quality of winter and summer rearing habitat by improving stream and estuarine habitat complexity — including increasing amounts of large wood and pool habitat, and connecting side channels, wetlands, and other off-channel areas. Collaborative actions will also focus on improving water quality, especially by reducing summer water temperatures, increasing water availability by reducing water withdrawals, reducing fine sediment levels, and increasing the amount of, and connectivity to, tidal wetland habitat.

Key Strategies and Actions for the Mid-South Coast Stratum

- Revise local regulatory mechanisms to increase protection and restoration of watershed processes that promote winter and summer rearing habitats including Oregon’s Agricultural Water Quality Management Act, Oregon Forest Practices Act, FEMA National Floodplain Insurance Program, and state beaver statutes and administrative rules.
- Develop and approve scientifically credible, thorough Strategic Action Plans for the Coos, Coquille, Floras/New, and Sixes populations, consistent with ESU-level common framework.
- Implement the Strategic Action Plans to protect and restore ecosystem processes and functions and coho salmon habitats. Activities should include restoring habitat capacity for rearing juvenile coho salmon by increasing large wood loading, beaver habitat, and wetland/ off-channel connectivity, and by increasing native riparian vegetation to provide bank stability and shade stream reaches.
- Collaborate with governmental and non-governmental organizations and others to identify, and implement, actions that will protect and restore watershed processes, provide stream complexity for juvenile rearing, connect side channels, wetland and off-channel habitats, and reduce fine sediment levels.
- Coordinate with ODEQ, ODF, SWCDs, and others to improve water quality, especially water temperatures, to increase carrying capacity and provide high quality summer rearing habitat for juvenile coho salmon.

- As resources allow, develop and approve scientifically credible, thorough Strategic Action Plans for the Johnson and Twomile populations, consistent with ESU-level common framework.
- Provide and support public outreach, education and volunteer actions to protect and restore ecosystem process and functions and improve juvenile coho salmon rearing habitats.
- Re-establish connectivity of tidal and freshwater wetlands, especially during winter. Examples include the Bandon Marsh (Ni-les'tun Tidal Marsh) restoration and the Winter Lake area, both in the Coquille basin.
- Protect and as needed, re-introduce, beaver to increase beaver dam abundance
- Establish increased riparian buffers with native riparian vegetation on agricultural and forestry lands
- Reduce or eliminate new road development on private and federal timberlands and decommission existing roads
- Reduce existing infrastructure in floodplains and limit future development
- Reduce water withdrawals, especially in gravel-bedded tributaries
- Re-establish streams to their floodplains
- Monitor predation by non-indigenous fish in the Coquille and Coos Rivers

Priority Watershed Actions

Private Timber Lands

1. Increase protection of riparian reserves and no-touch buffer widths.
2. Eliminate the construction of permanent new roads and limit placement of temporary roads. Decommission roads or relocate roads, where practicable.
3. Increase voluntary landowner placement of large wood into stream channels.

Agriculture Lands

1. Plant, restore, and protect riparian areas adjacent to stream channels.
2. Improve lateral connectivity from the stream channels to adjacent wetlands.
3. Seek opportunities to improve tidegates or floodgates to flood adjacent floodplains during the winter flows.
4. Improve natural stream channel form and function by discontinuing stream channelization and armoring of stream banks, and by placing large wood into stream channels.
5. Conserve water usage to allow more instream water.

Federal Lands

1. Maintain a strong aquatic conservation strategy of some form within future management plans that protects ecological processes that form high quality coho salmon habitat.
2. Improve the transportation network that includes reducing the road network, minimizing the hydrologic connection of the roads to streams, reducing road-related fish passage barriers, and minimizing any new road development, especially in riparian zones

Beaver Management

1. Develop a beaver conservation plan.

2. Prohibit killing beaver within the range of OC coho salmon by any entity other than a state agency and only when all other options are exhausted.
3. Create a program to educate landowners and the public in general about the benefits of beaver to the health of our ecosystems, with a focus on benefits to salmonids and opportunities to conserve and manage beaver through cost effective, non-lethal management practices (Pollock et al. 2004; DeVries et al. 2012).
4. Incorporate beaver conservation into restoration actions.

Estuary and Tidal Lands

1. Develop an estuary lowlands restoration strategy that considers improved access to historic floodplains through tidegate elimination, management, and operations; levee removal; and overwater structure modifications.

Instream Flows

1. Organize an interagency stream flow assessment team to evaluate and identify:
 - a. Refugia areas that have adequate stream flow, water temperature, and riparian protections to support coho salmon.
 - b. Existing stream flow needs.
 - c. A strategy to address flow restoration, which will protect existing refugia, expand refugia to adjacent reaches, and provide a connection to a larger network of refugia areas.

Secondary Watershed Actions

Fish Passage and Access

1. Continue efforts to improve fish passage at dams, bridges, culverts, and other identified fish passage barriers. Assess remaining fish passage barriers and develop and implementation strategy and schedule.

Management of Fine Sediment

1. Identify upstream sources of fine sediment loads.
2. Relocate streamside roads.
3. Reduce soil compaction.
4. Identify high debris flow hazard areas (Sixes population).
5. Identify soils with high turbidity potential (Sixes population).

State Lands

1. Coordinate with NMFS to develop a Forestry Habitat Conservation plan(s) to protect and restore OC coho salmon habitat.

Table 6-7. Habitat component specific actions to restore high quality coho salmon habitat.

Action id	Habitat component	Strategy	Action	Area	Priority
MSCS-1	Tributaries	Improve instream flows	Improve water quality by developing water conservation strategies on the upslope agricultural areas with the intent of transferring conserved water to instream flows.	Coquille, Sixes	High
MSCS-2	Tributaries	Improve water quality	Improve water quality by improving instream flows, channel complexity, stream shade, and substrate retention.	All Populations	High
MSCS-3	Tributaries	Improve wood recruitment to support long-term increases in habitat complexity	Improve timber harvest activities (increased harvest buffers on private industrial timberlands, reduce road densities on private and federal timberlands)	All Populations	High
MSCS-4	Tributaries	Improve wood recruitment to support long-term increases in habitat complexity	Improve state agricultural practices (grazing and hay production buffers on ag land adjacent to ESA-listed streams)	All Populations	High
MSCS-5	Tributaries	Increase habitat complexity	Improve state agricultural practices (disallow stream channel dredging in ESA-listed streams flowing through or adjacent to ag lands)	All Populations	High
MSCS-6	Tributaries	Increase habitat complexity	Increase large wood, boulders, or other instream structure	All streams where coho would benefit immediately	High
MSCS-7	Tributaries	Increase habitat complexity	Increase large wood, boulders, or other instream structure	All Populations	Medium
MSCS-8	Tributaries	Increase habitat complexity	Conduct riparian planting projects on streams that flow through or adjacent to ag lands to increase wood recruitment to streams	All streams where coho would benefit immediately;	High
MSCS-9	Tributaries	Increase habitat complexity	Reconnect historical off channel habitat	All Populations	High
MSCS-10	Tributaries	Improve riparian forests to increase shade and reduce stream temperatures	Improve agricultural practices by protecting riparian forests and providing stream buffers sufficient for OC coho salmon recovery through protection and enhancement of shade to reduce stream temperatures and improve water quality.	All Populations	High
MSCS-11	Tributaries	Improve riparian forests to increase shade and reduce stream temperatures	Improve timber management activities, including road management, by protecting riparian forests and providing stream buffers sufficient for OC coho salmon recovery through protection and enhancement of shade to reduce stream temperatures and improve water quality.	All Populations	High
MSCS-12	Tributaries	Increase water	Improve water quality by increasing	Sixes	High

Action id	Habitat component	Strategy	Action	Area	Priority
		quality by reducing fine suspended sediment loads	harvest buffers on private industrial timberlands and by reducing road densities on private and federal timberlands to reduce chronic erosion and sediment inputs		
MSCS-13	Tributaries	Increase water quality by reducing fine suspended sediment loads	Improve agricultural practices (grazing and hay production buffers on ag land adjacent to ESA-listed streams) to reduce chronic erosion and sediment inputs	Sixes	High
MSCS-14	Tributaries,	Increase habitat complexity	Improve gold placer and gold suction dredge regulations to minimize or prevent impacts to OC coho salmon; consider special closed areas, closed seasons, and restrictions on methods and activities.	Sixes, Coquille	High
MSCS-15	Off-Channel	Increase habitat complexity and connectivity to side-channels	Increase large wood, boulders, or other instream structure	All streams where coho would benefit immediately	High
MSCS-16	Off-Channel and Wetlands	Increase habitat complexity and connectivity and access to alcoves, off-channel ponds, floodplains, and wetlands	Increase beaver abundance	All streams where coho salmon would benefit immediately	High
MSCS-17	Off-Channel	Increase habitat complexity and connectivity to side-channels	Increase large wood, boulders, or other instream structure	All Populations	Medium
MSCS-18	Off-Channel and Wetlands	Increase habitat complexity and connectivity and access to alcoves, off-channel ponds, floodplains, and wetlands	Increase beaver abundance	All Populations	Medium
MSCS-19	Wetlands	Improve direct and indirect wetland connectivity to streams	Reduce existing and limit development of channel confining structures including roads and infrastructure in the floodplain that disconnect wetlands from tributaries and mainstems	All streams where coho salmon would benefit immediately	High
MSCS-20	Mainstem	Improve instream flows	Improve water quality by developing water conservation strategies on the upslope agricultural areas with the intent of transferring conserved water to instream flows.	Coquille, Sixes	High
MSCS-21	Mainstems	Improve marginal and streambank habitat complexity	Increase large wood and marginal and streambank habitat structure	All streams where coho salmon would benefit immediately	High
MSCS-22	Mainstems	Improve marginal	Increase large wood and marginal	All Populations	Medium

Action id	Habitat component	Strategy	Action	Area	Priority
		and streambank habitat complexity	and streambank habitat structure		
MSCS-23	Mainstems	Improve wood recruitment to support long-term increases in habitat complexity	Improve timber harvest activities (increased harvest buffers on private industrial timberlands, reduce road densities on private and federal timberlands)	All Populations	High
MSCS-24	Mainstems	Increase habitat complexity	Reconnect historical off channel habitat	All Populations	High
MSCS-25	Mainstems	Improve riparian forests to increase shade and reduce stream temperatures	Improve agricultural practices by protecting riparian forests and providing stream buffers sufficient for OC coho salmon recovery through protection and enhancement of shade to reduce stream temperatures and improve water quality.	Sixes, Floras	High
MSCS-26	Mainstems	Improve riparian forests to increase shade and reduce stream temperatures	Improve agricultural practices by protecting riparian forests and providing stream buffers sufficient for OC coho salmon recovery through protection and enhancement of shade to reduce stream temperatures and improve water quality.	Coos, Coquille	Medium
MSCS-27	Mainstems	Increase water quality by reducing fine suspended sediment loads	Improve water quality by increasing harvest buffers on private industrial timberlands and by reducing road densities on private and federal timberlands to reduce chronic erosion and sediment inputs	Sixes	High
MSCS-28	Mainstems	Increase water quality by reducing fine suspended sediment loads	Improve agricultural practices (grazing and hay production buffers on ag land adjacent to ESA-listed streams) to reduce chronic erosion and sediment inputs	Sixes	High
MSCS-29	Mainstems	Increase habitat complexity	Improve state and federal regulations and permitting of gravel mining (retain gravel bar form and function).	Coquille	High
MSCS-30	Mainstems	Improve riparian forests to increase shade and reduce stream temperatures	Improve timber management activities, including road management, by protecting riparian forests and providing stream buffers sufficient for OC coho salmon recovery through protection and enhancement of shade to reduce stream temperatures and improve water quality.	Sixes, Floras	High
MSCS-31	Mainstems	Improve riparian forests to increase shade and reduce stream temperatures	Improve timber management activities, including road management, by protecting riparian forests and providing stream buffers	Coos, Coquille	Medium

Action id	Habitat component	Strategy	Action	Area	Priority
			sufficient for OC coho salmon recovery through protection and enhancement of shade to reduce stream temperatures and improve water quality.		
MSCS-32	Mainstem	Increase habitat complexity	Conduct native riparian tree planting projects on streams that flow through or adjacent to ag lands to increase wood recruitment to streams	All Populations	High
MSCS-33	Mainstem	Improve water quality	Improve water quality by improving instream flows, channel complexity, stream shade, and substrate retention.	All Populations	High
MSCS-34	Mainstems	Improve wood recruitment to support long-term increases in habitat complexity	Improve agricultural practices (grazing and hay production buffers on agricultural land adjacent to ESA-listed streams)	All Populations	High
MSCS-35	Mainstem	Increase habitat complexity	Conduct native riparian tree planting projects on streams that flow through or adjacent to ag lands to increase wood recruitment to streams	All Populations	High
MSCS-36	Estuary	Increase access to sloughs, side channels, and floodplains	Reduce fish passage barriers to floodplains by managing tidegate presence and operations.	Coos, Coquille	High
MSCS-37	Estuary	Increase habitat complexity	Seek to restore winter habitat refuge areas in the floodplains in the freshwater ecotone of the upper tidal area of the estuaries.	Coos Watershed: Palouse Creek, Larson Creek, Kentucky Creek, Willanch Creek, Catching Slough, South Slough, and tidal areas above the Millicoma River and South Coos River confluence	High
MSCS-38	Estuary	Increase habitat complexity	Seek to restore winter habitat refuge areas in the floodplains in the freshwater ecotone of the upper tidal area of the estuaries.	Coquille Watershed: from the confluence of the South Fork and North Fork below Myrtle Point downstream to Bear Creek	High
MSCS-39	Estuary	Increase access to sloughs, side channels, and floodplains	Reduce fish passage barriers to floodplains by reducing or setting dikes back.	Estuary wide	High