



Gleaning CCT Data from 27+ Years of Salmon & Steelhead Monitoring

“Ancillary” Cutthroat Monitoring in Western Oregon



Background



- Inadvertent/Supplemental/Peripheral?
- OASIS Project: Salmon & Stw Monitoring
 - 1945 to present
 - GRTS: 1998 to present
- “Ancillary” Cutthroat Data
 - Timing?
 - Distribution?
 - Abundance?



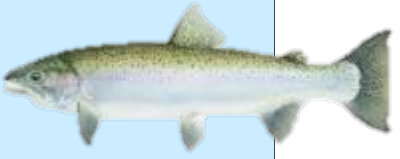


Background cont.



- “Supplemental” Lamprey monitoring
 - Index of Abundance (Clemens et al. 2021)
- CCT data sources
 - Salmon Season
 - Carcass Recovery
 - Steelhead Season
- Temporal Distribution
 - Salmon Season (October – January)
 - Winter Steelhead (February – May)
- Spatial Distribution
 - Coho frame (250 – 600 sites)
 - Population scale
 - STW frame (150 – 400 sites)
 - Monitoring Area scale







Salmon Season Data



- September – January
- ~299,000 records
- Limited to Field Comments
 - 538 records (0.18%)
 - 1945 – *“Dead cutthroat found near goat ranch.”*
 - 2023 – *“Abundant cutthroat, not counted”*

| Monitoring Area | # Records |
|-----------------|-----------|
| North Coast | 103 |
| Mid Coast | 253 |
| Mid-South Coast | 71 |
| Umpqua | 68 |
| South Coast | 12 |
| Lower Columbia | 31 |

| Basin | # Records |
|-------------|-----------|
| Salmon R. | 5 |
| Siletz R. | 76 |
| Yaquina R. | 14 |
| Beaver Crk. | 20 |
| Alsea R. | 91 |
| Siuslaw | 23 |
| D.O. tribs | 24 |



Carcass Recovery Data



- Only 30 of ~218,000 recoveries
 - 13 males, 5 females, 12 unk.
 - 115 – 380 mm MEPS (4.5" – 15")
 - 2/3 > 200 mm (~8")
 - Majority (83%) recovered during Salmon season
 - 1/3 of recoveries on the Mid Coast





Steelhead Season Data



- 3,781 of ~103,000 records (4%)
 - Live counts (60%) and redds (40%)
 - Distribution and Timing?





Occupancy



2023

Average, minimum, and maximum percentage of random steelhead sites occupied by Coastal Cutthroat per monitoring area, 2003 – 2023

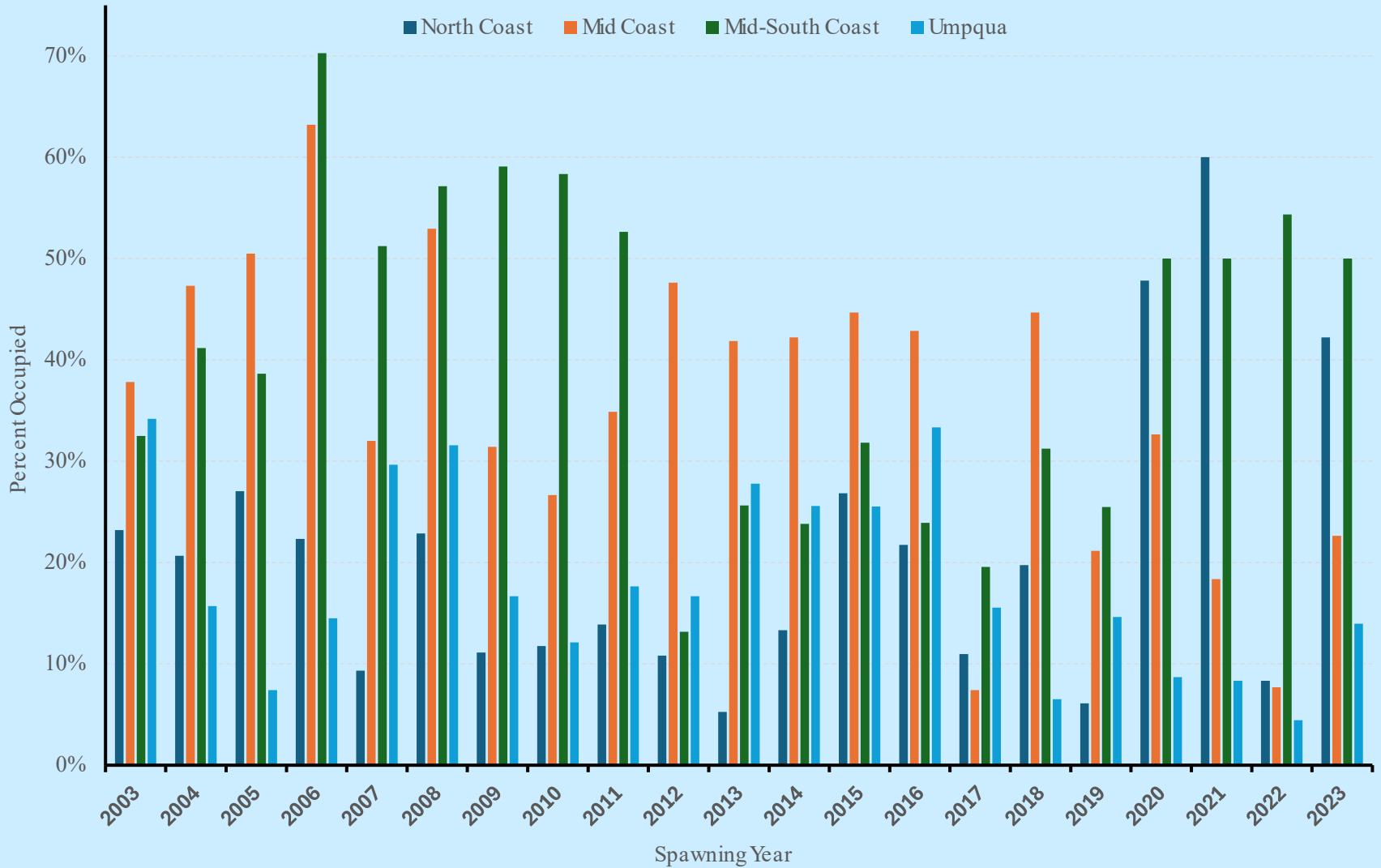
| Monitoring Area | Average | 2023 | Min | Max |
|-----------------|---------|------|-----|-----|
| North Coast | 21% | 42% | 5% | 60% |
| Mid Coast | 36% | 23% | 7% | 63% |
| Mid-South Coast | 41% | 50% | 13% | 70% |
| Umpqua | 18% | 14% | 4% | 34% |
| South Coast | 22% | | 0% | 53% |
| Lower Columbia | 8% | 14% | 0% | 17% |



Occupancy



Percentage of sites occupied by CCT in random Stw surveys by Coastal MA, 2003 - 2023

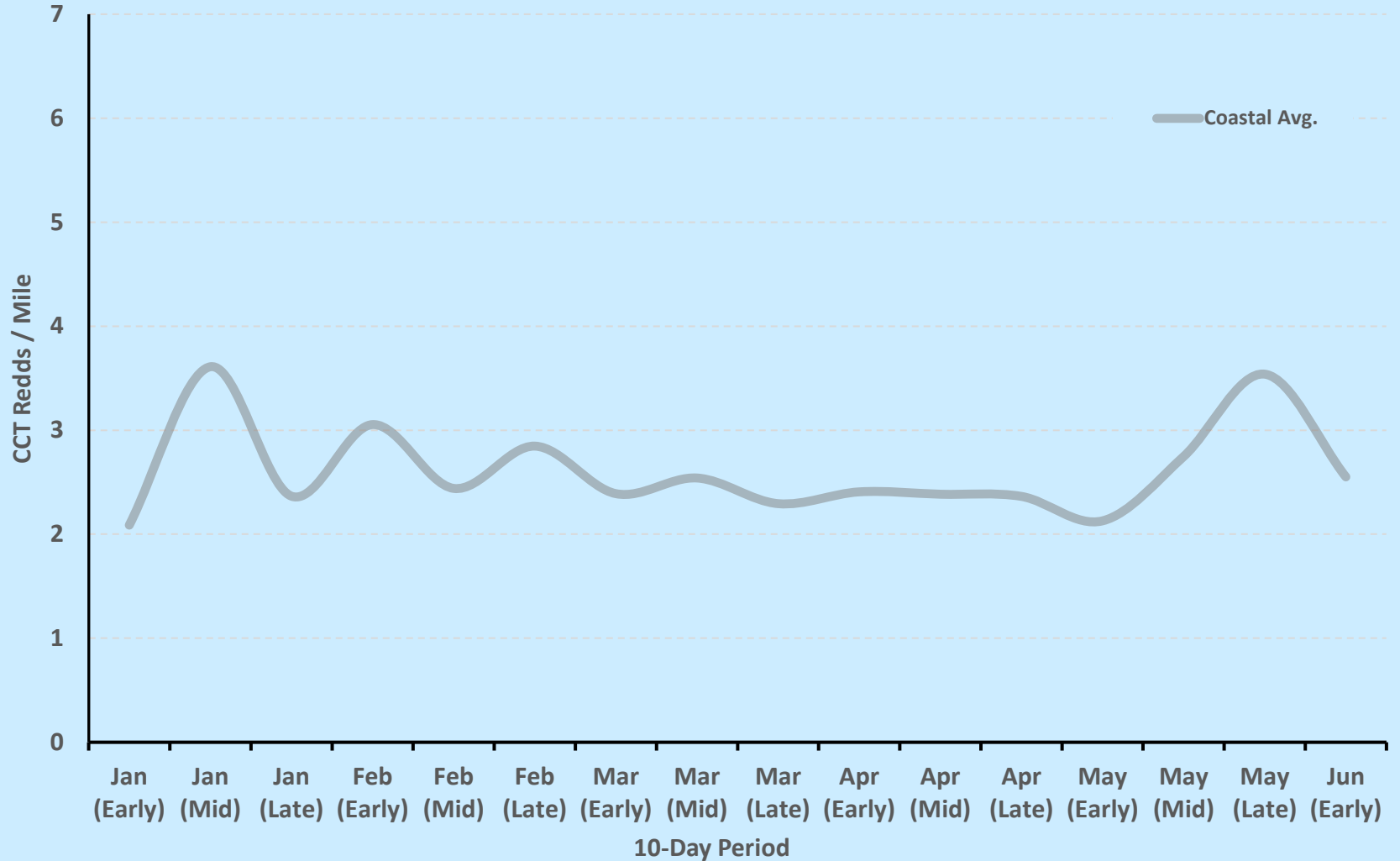




Spawn Timing



Avg. CCT Redds Per Mile by Monitoring Area

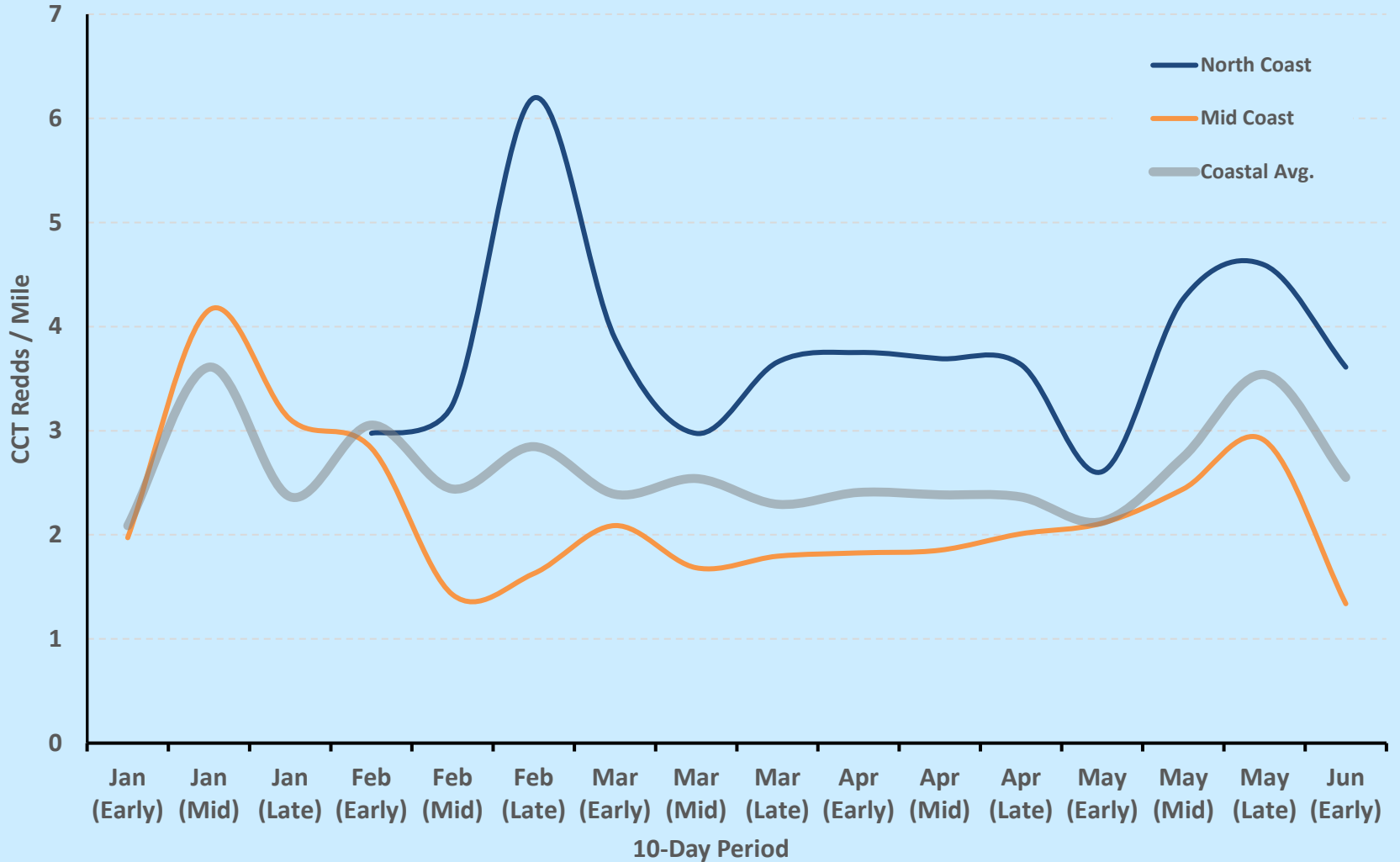




Spawn Timing



Avg. CCT Redds Per Mile by Monitoring Area

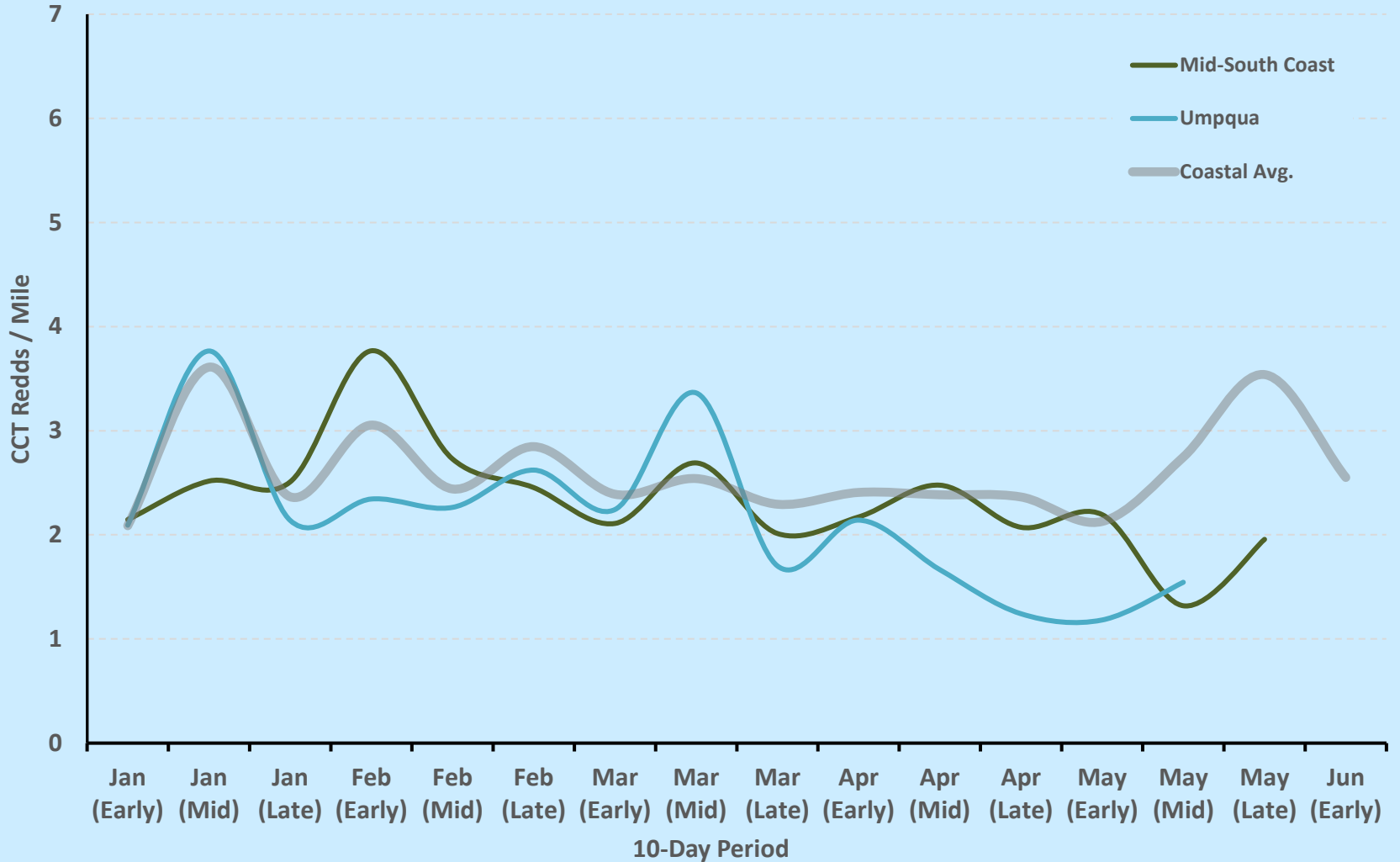




Spawn Timing



Avg. CCT Redds Per Mile by Monitoring Area

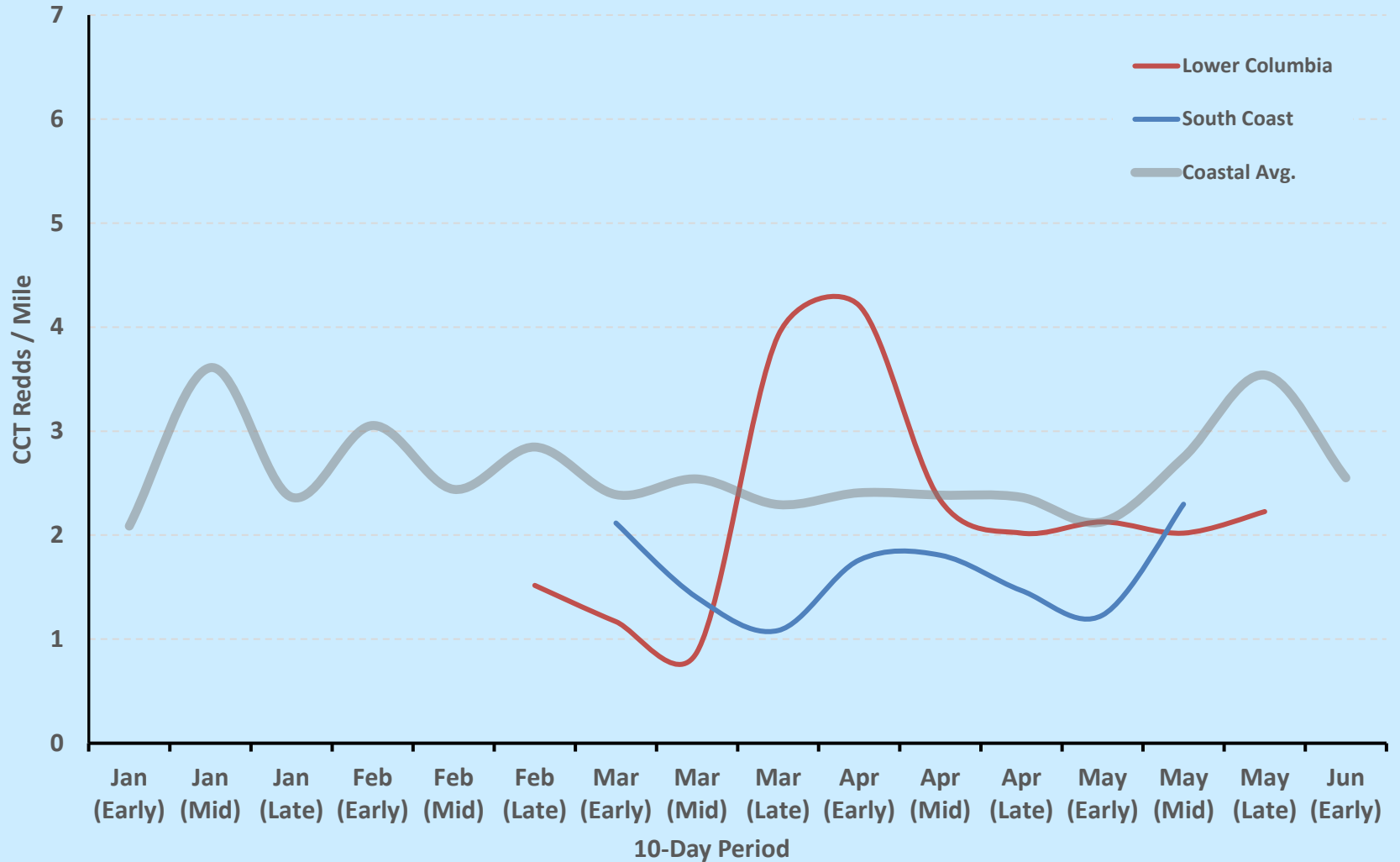




Spawn Timing



Avg. CCT Redds Per Mile by Monitoring Area





Summary



- Most data is subjective
- Can paint a broad scale picture
 - Mid Coast appears to be the hotspot
 - Fewer in Lower Columbia basins
- Need to integrate salmon season data
- What other info should we be collecting?
 - Resident vs Searun?
- Future monitoring/research
 - Habitat relationships?
 - Adult Salmon/Steelhead relationships?
 - Juvenile relationships?

A photograph of a shallow stream flowing over a bed of smooth, brownish rocks. The water is clear and reflects the surrounding green foliage and trees. The stream is bordered by a dense forest with various plants and trees visible in the background.

Questions

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