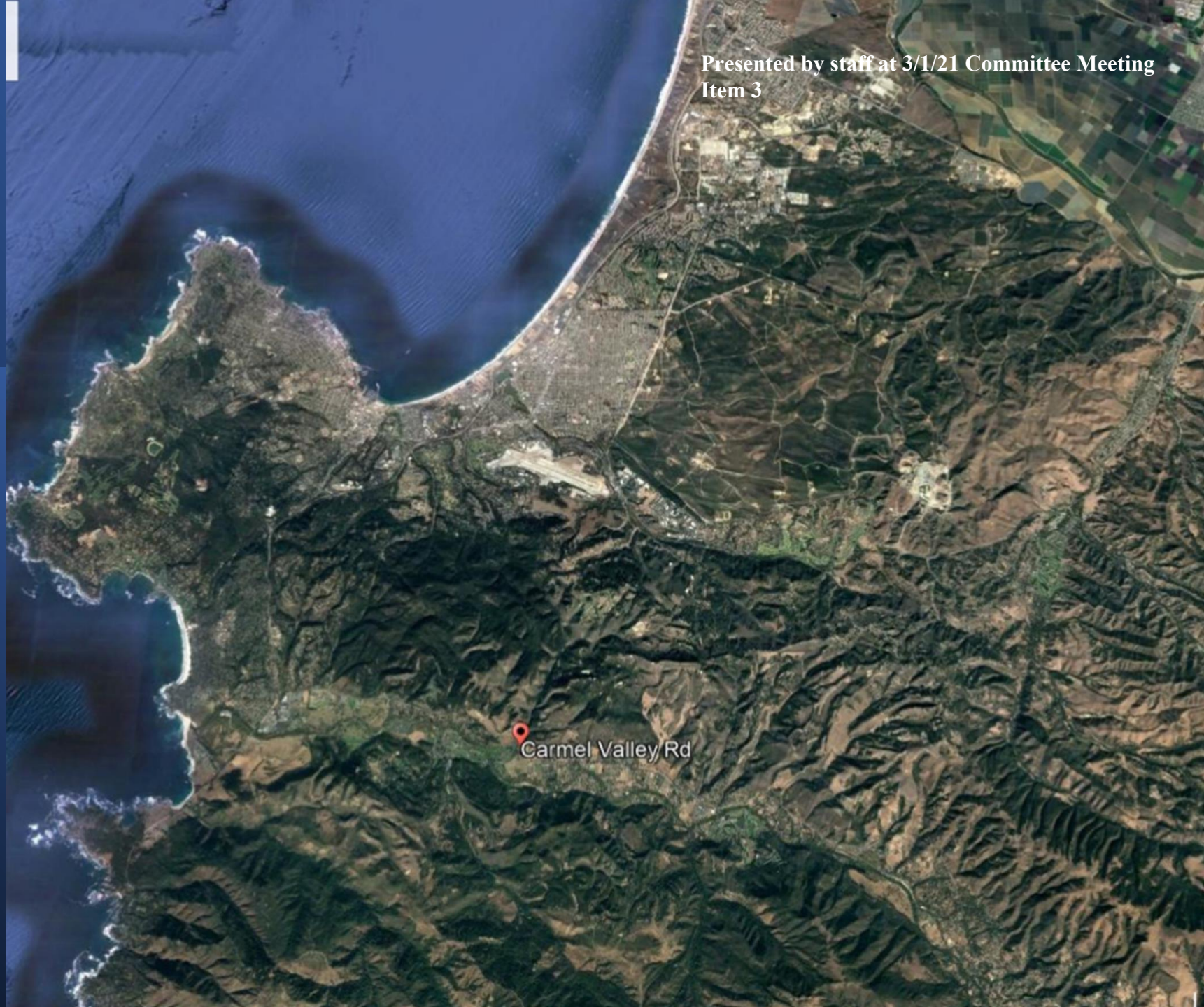
Presented by staff at 3/1/21 Committee Meeting Item 3

Source Water Pumping in Monterey




Carmel Valley Rd

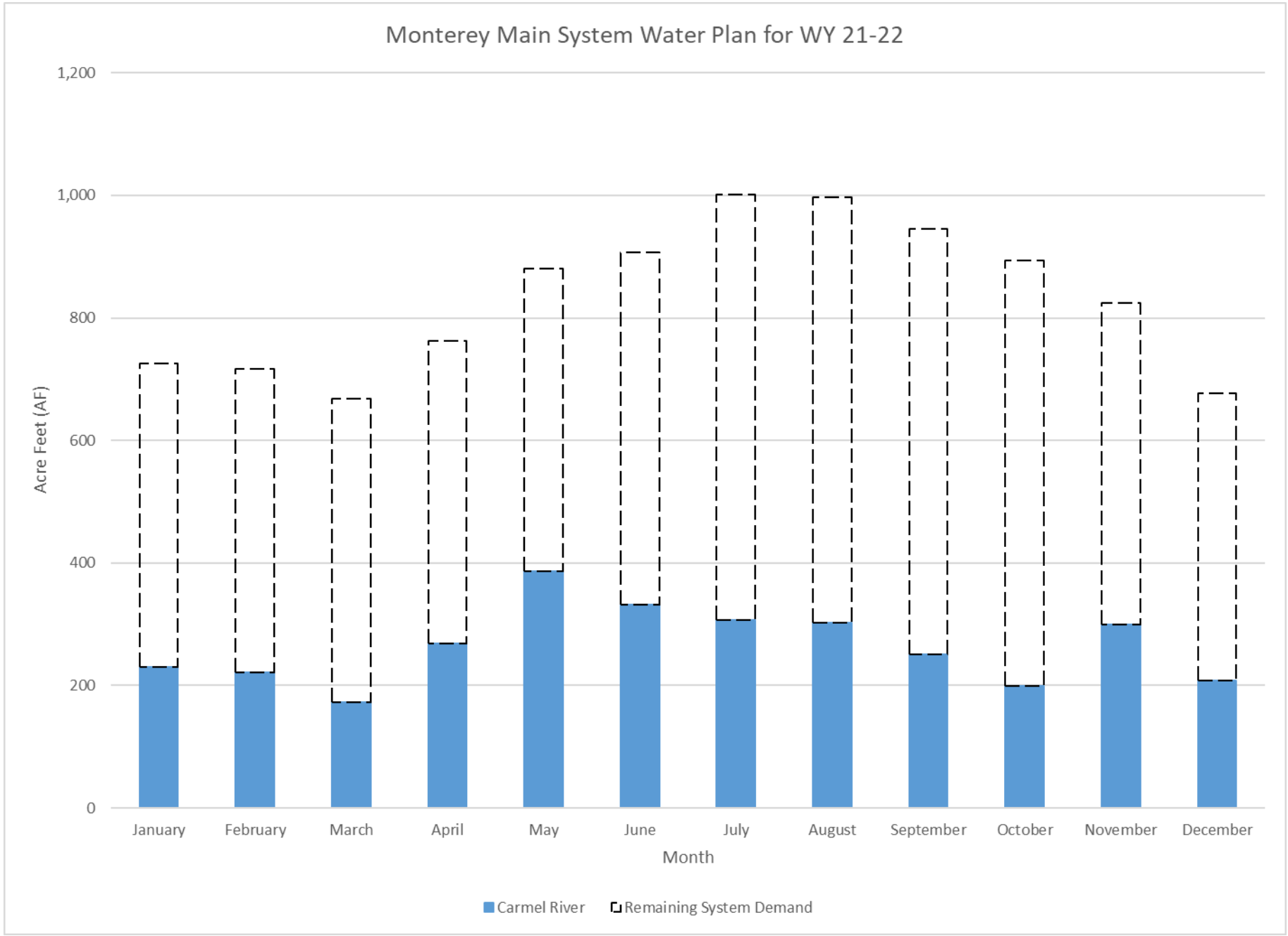

Carmel River Wells
Carmel Valley Rd


Sand City Desal Wells
Carmel River Wells
Carmel Valley Rd


Sand City Desal Wells
Seaside Region Wells
Carmel River Wells
Carmel Valley Rd


Sand City Desal Wells
ASR Wells
Seaside Region Wells
Carmel River Wells
Carmel Valley Rd

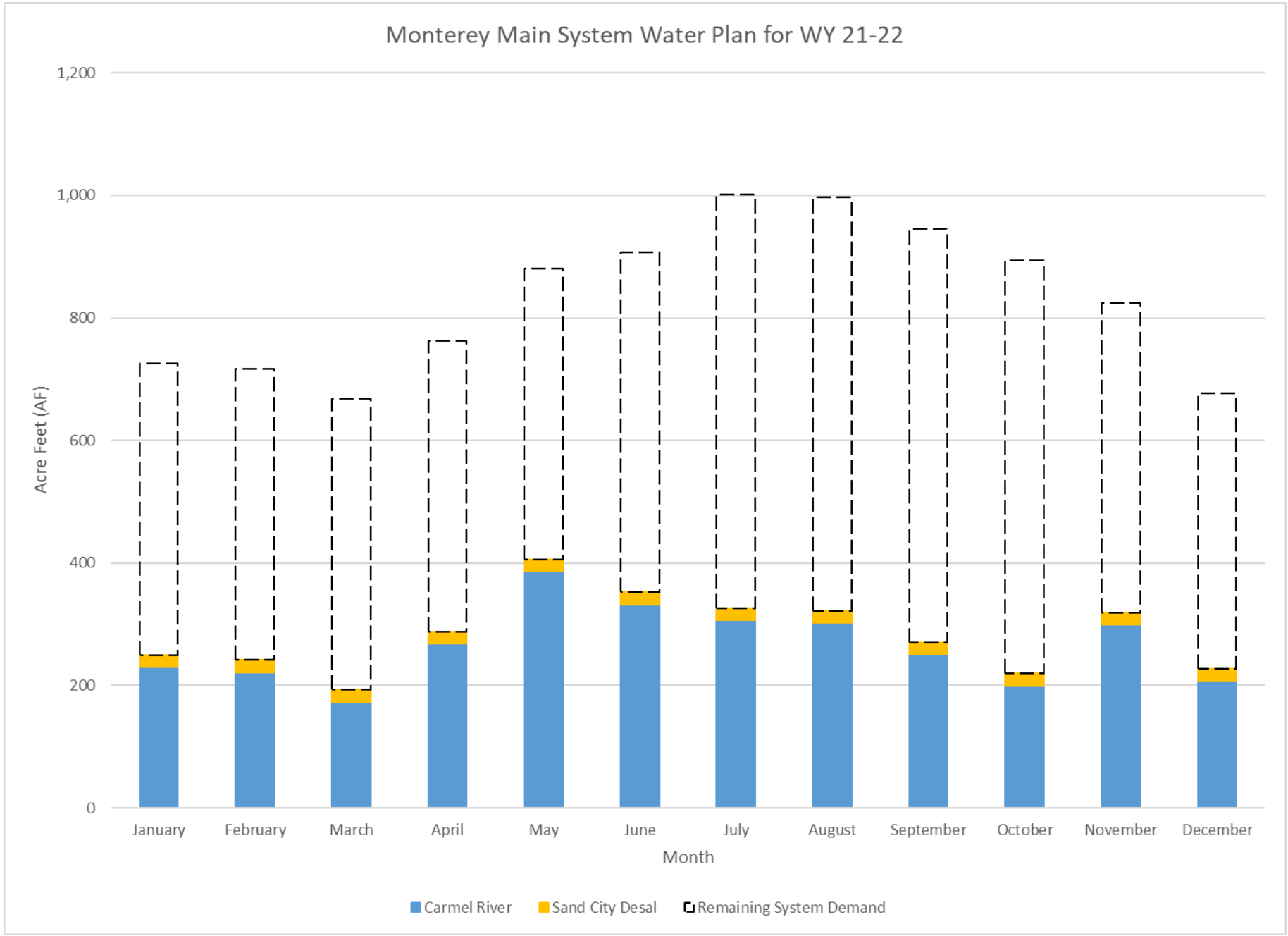
How different source waters vary monthly after 2021



Carmel River

Remaining System Demand

Maximize 3,376 AF to minimize over-pumping of Seaside Basin

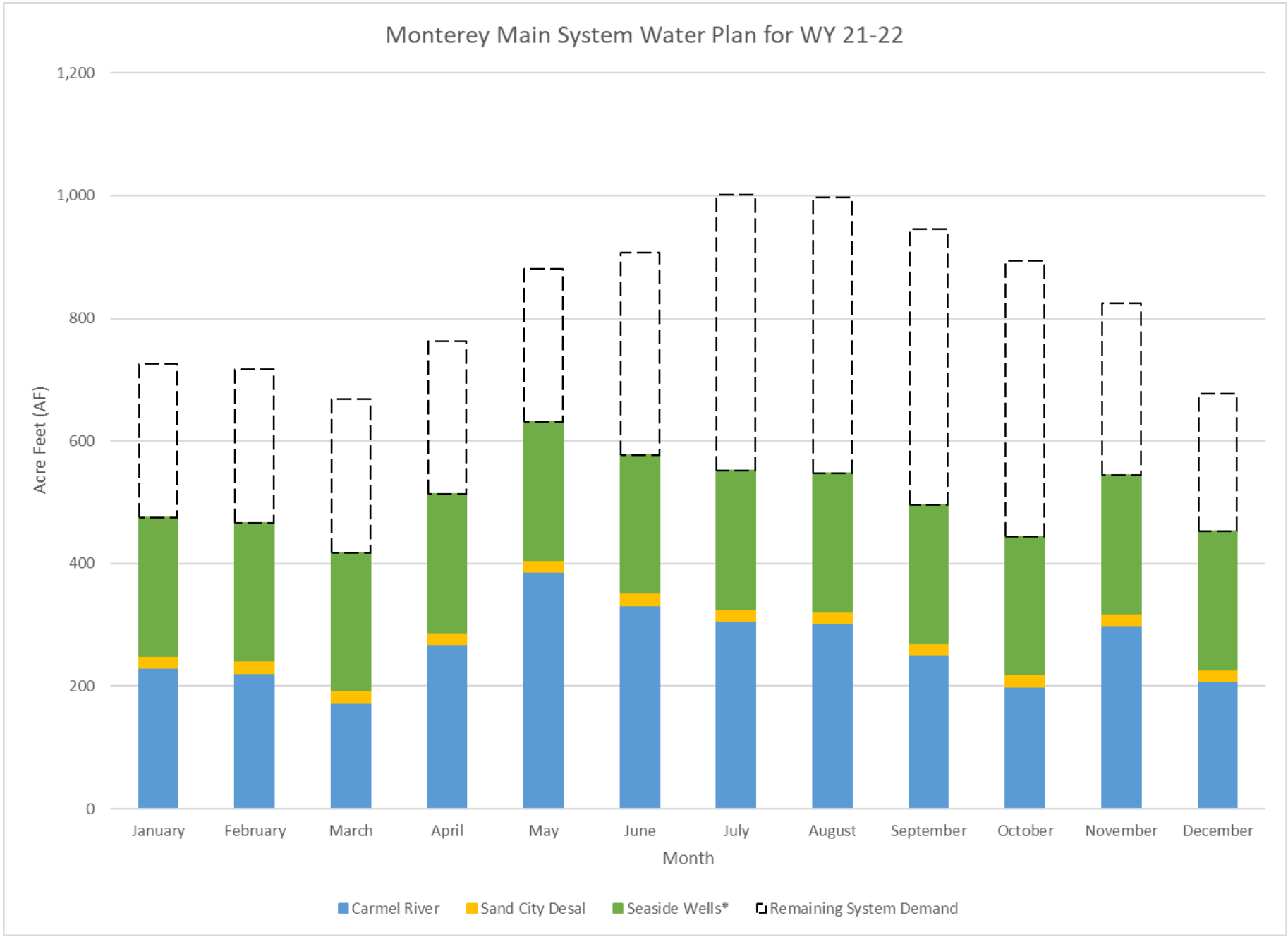


Sand City Desal

Carmel River

Remaining System Demand

Sand City Desal monthly based on historic average, plus increase from new intake well



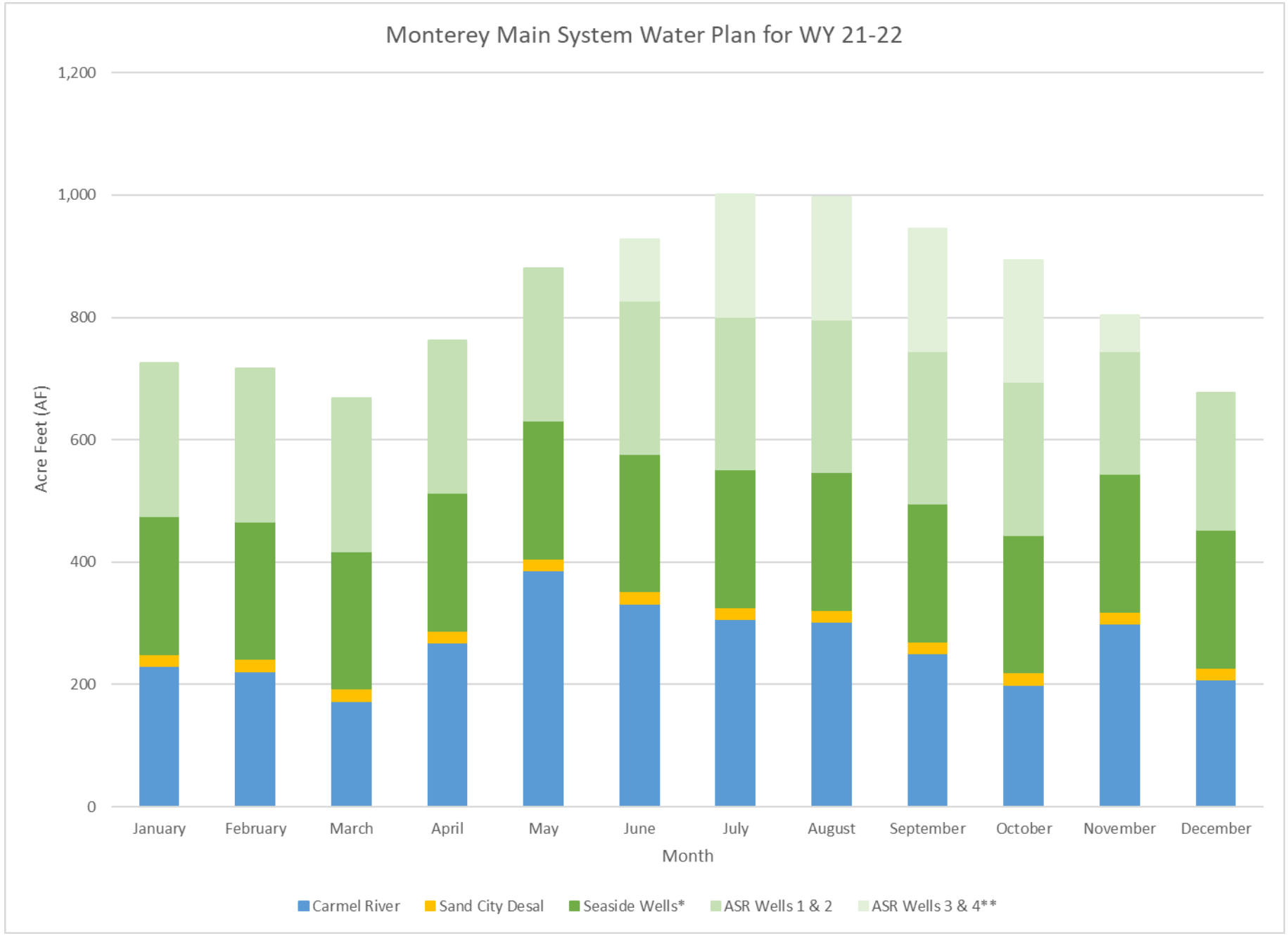
Seaside Wells

Sand City Desal

Carmel River

Remaining System Demand

"Seaside Wells" simply refers to five CAW wells in City of Seaside west of GJM



ASR Wells 3 & 4

ASR Wells 1 & 2

Seaside Wells

Sand City Desal

Carmel River

ASR Well Extraction could be required 12 months of the year

How post 2021 monthly trends in source water relate to parallel pipeline and ASR operations

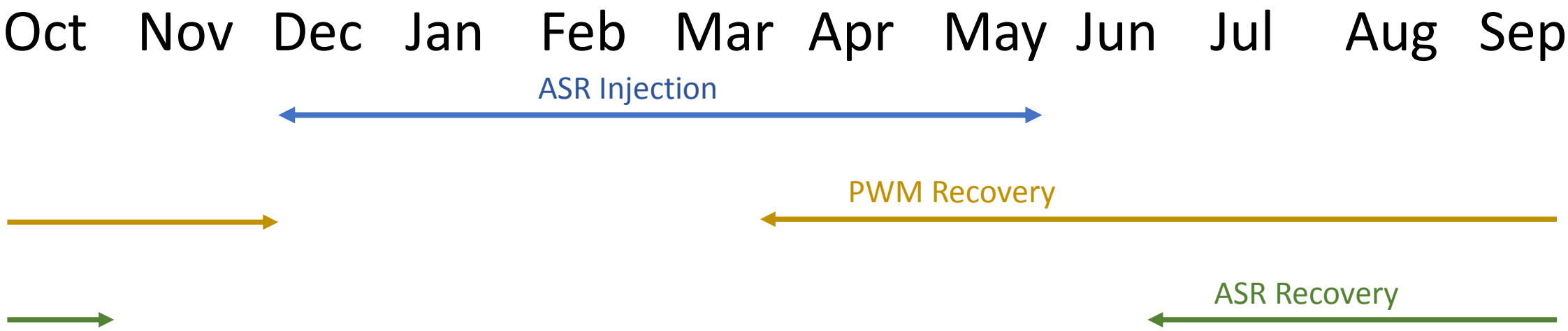

Forest Lake Res.
ASR, Pure Water and Seaside Native to Forest Lake
Crest Res.
Carmel River Water to ASR 3&4
Carmel Valley Rd
If ASR well extraction occurs 12 months of the year and no parallel pipeline, then likely not possible to operate ASR Injection.
Google Earth
Image © 2020 TerraMetrics
Data CSUMB SFML, CA OPC
Data MBARI
4 mi
N

Timing of Operations of ASR and PWM

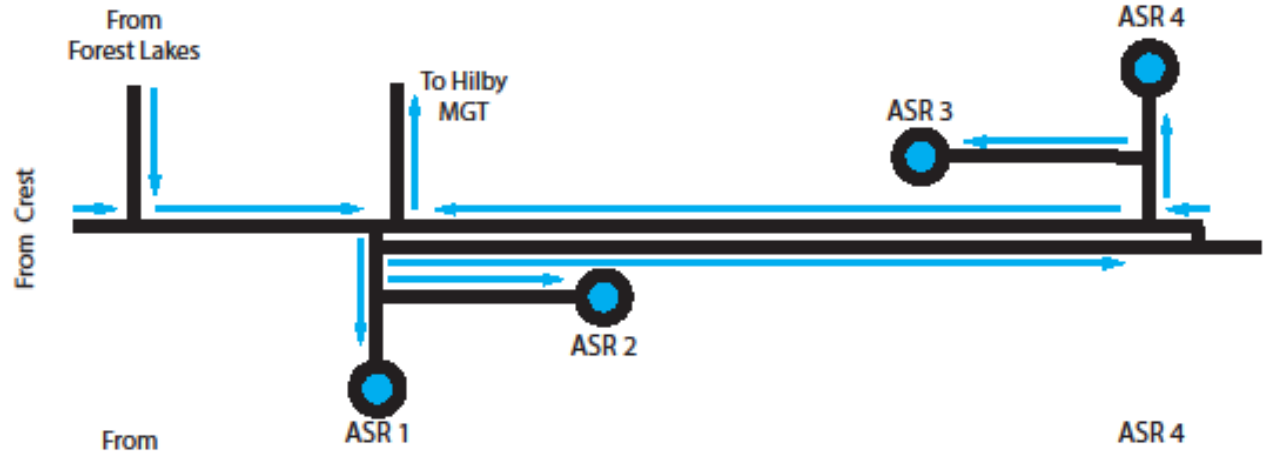
ASR Injection – Carmel Valley Wells Produce wells, water moves north in General Jim Moore towards ASR wells for injection of Carmel River Water

PWM Recovery – ASR wells produce water from the Seaside Groundwater Basin, water moves south in General Jim Moore and through Monterey Pipeline to Forest Lake Tanks

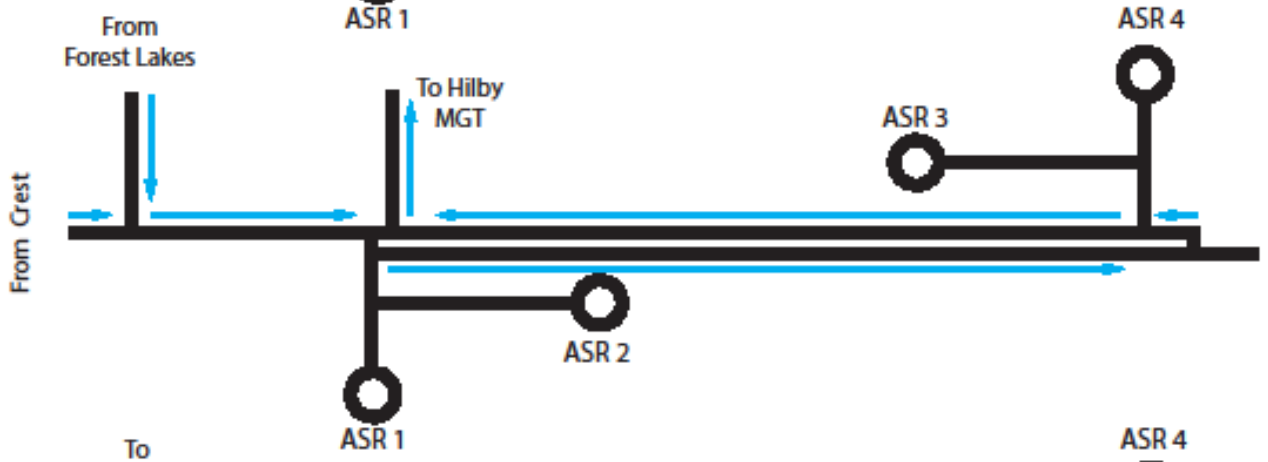
ASR Recovery – ASR wells produce water from the Seaside Groundwater Basin, water moves south in General Jim Moore and through Monterey Pipeline to Forest Lane Tanks



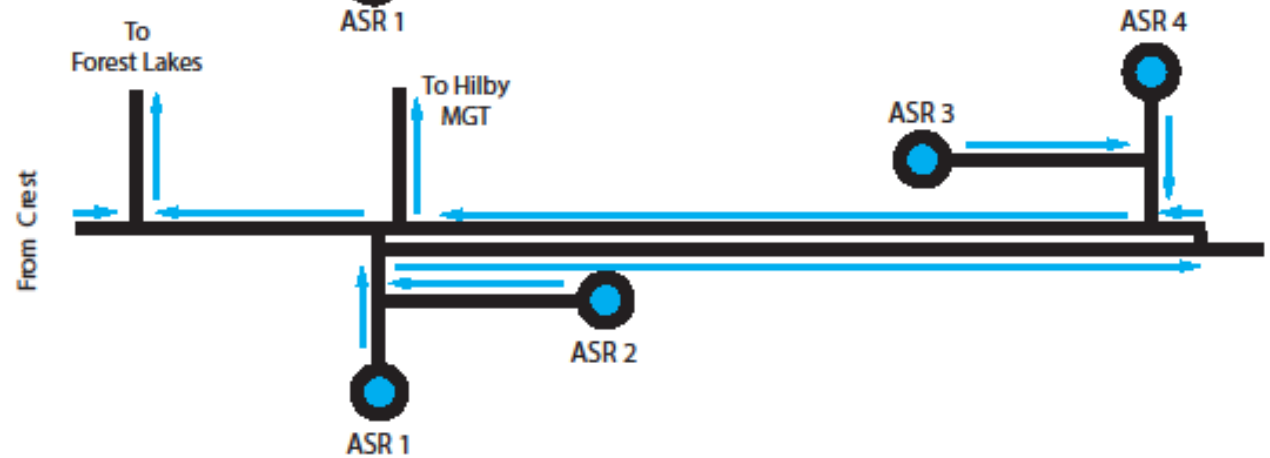
Current Carmel River ASR Operations



Carmel River ASR
Injection Mode



Carmel River ASR
Storage/Recirculation
Mode



Carmel River ASR
Recovery Mode

Functionality of Proposed Pipeline