



Critical Groundwater Area Review



**Oregon Water Resources Commission
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Overview

- Groundwater Administrative Areas in General
 - CGWAs in context
 - Periodic review

- Two examples:
 - Cooper – Bull Mountain
 - Butter Creek

Groundwater Admin. Areas in General



Photo: Drilling a dedicated observation well in the Harney Basin

Legislative Groundwater Policy

Groundwater Act of 1955 - ORS 537.525 (9)

Groundwater use shall be controlled in the event of declining groundwater levels (and a long list of other potential impairments)

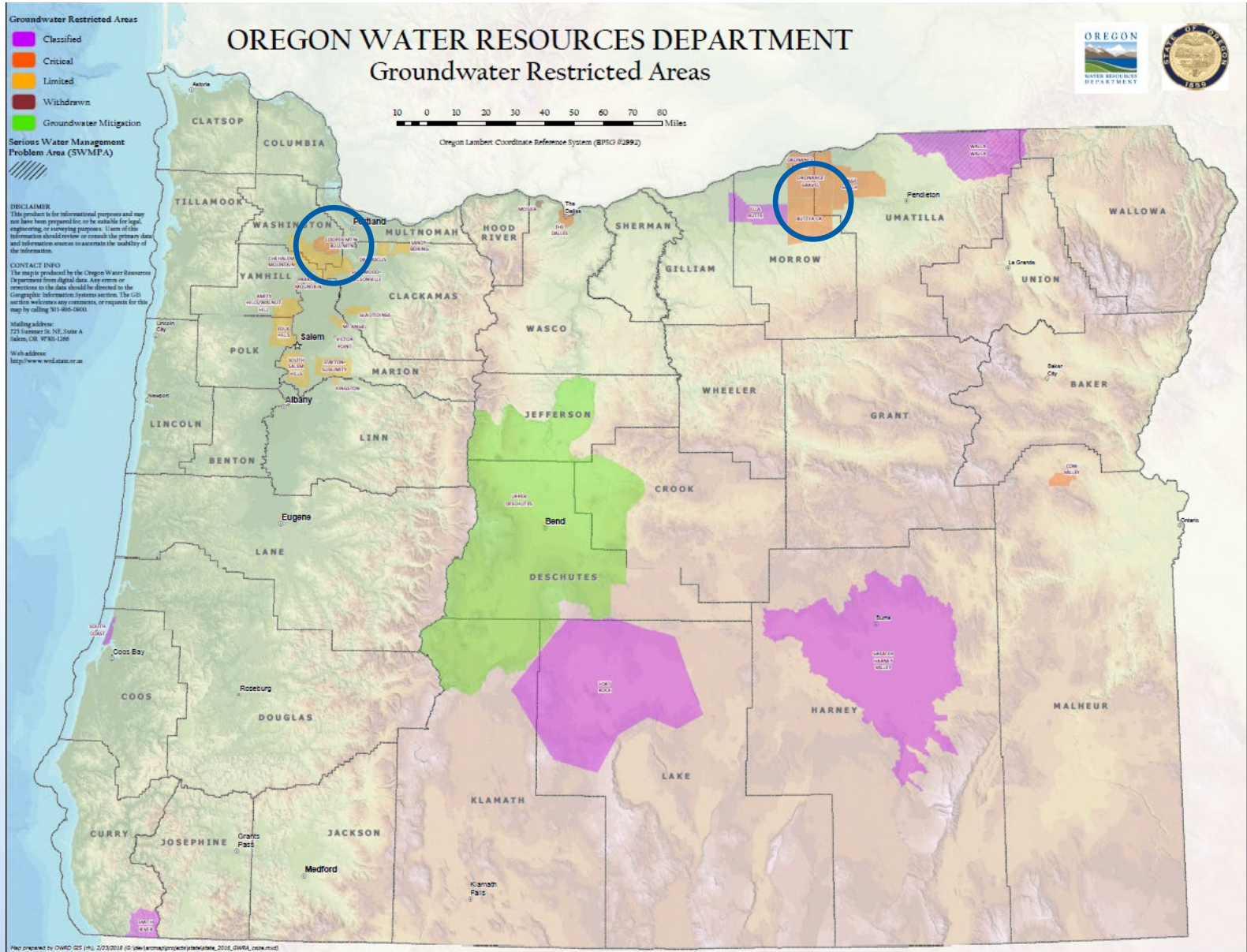
Preference is given to voluntary agreements by the groundwater users, which must be reviewed and approved by the Commission

The Commission shall take action when such voluntary joint action is not taken or is ineffective (CGWA is a tool to do this)

Types of Groundwater Restricted Areas

Management Tool	What It Does
Groundwater Mitigation Area	Requires mitigation for new uses; may limit new uses
Classification of Water	Limits new allocation of water
Serious Water Management Problem Area	Requires measuring devices and water use reporting; provides technical data
Critical Groundwater Area	May require measuring devices; may reduce and redistribute groundwater use

Groundwater Administrative Areas



Critical Groundwater Area Review

Review of CGWAs under ORS 537.780(3)

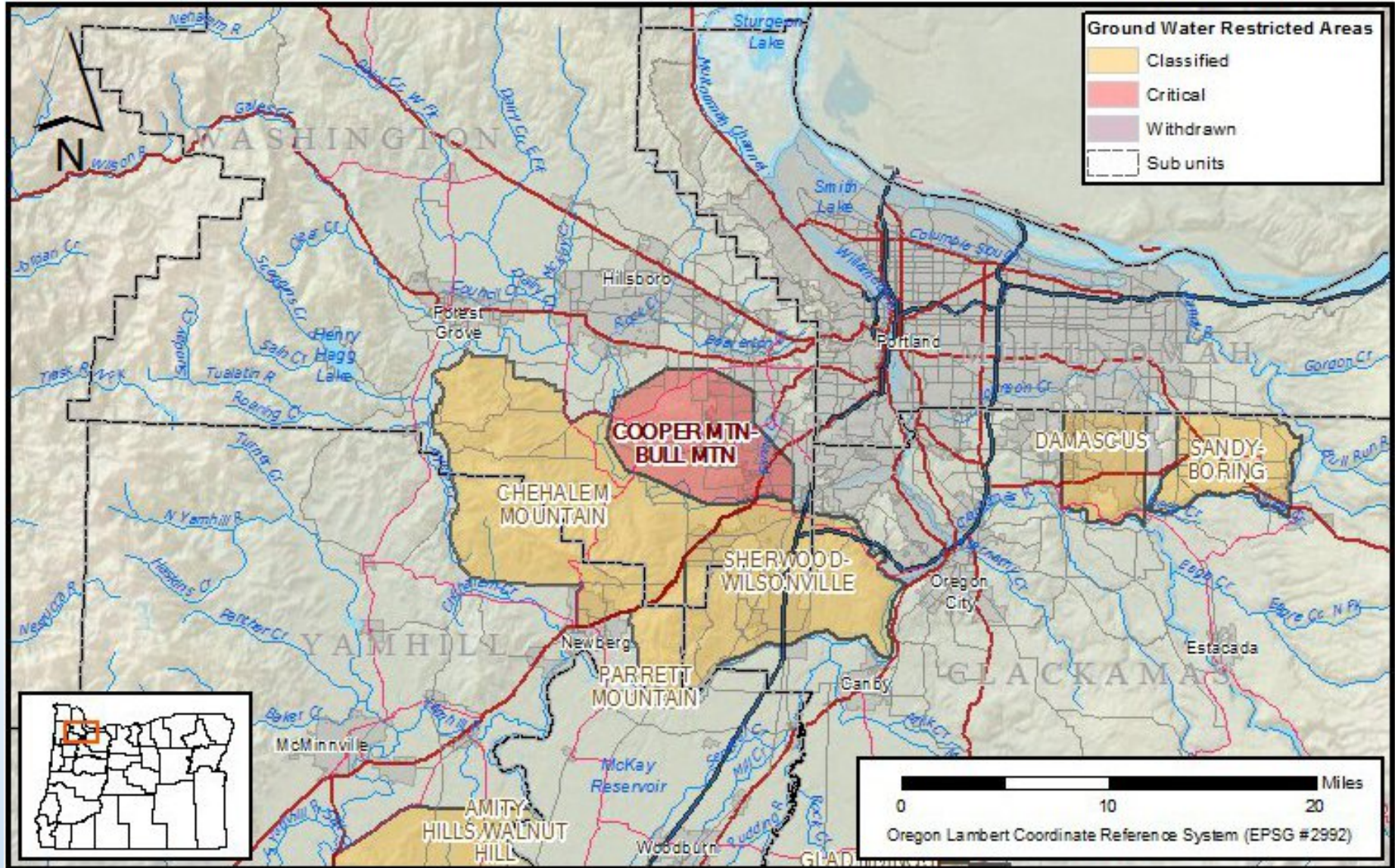
At least once every three years the commission shall review any rule... that restricts groundwater use in an area.

The review process shall include public notice and an opportunity to comment on the rule.

Two CGWA Examples

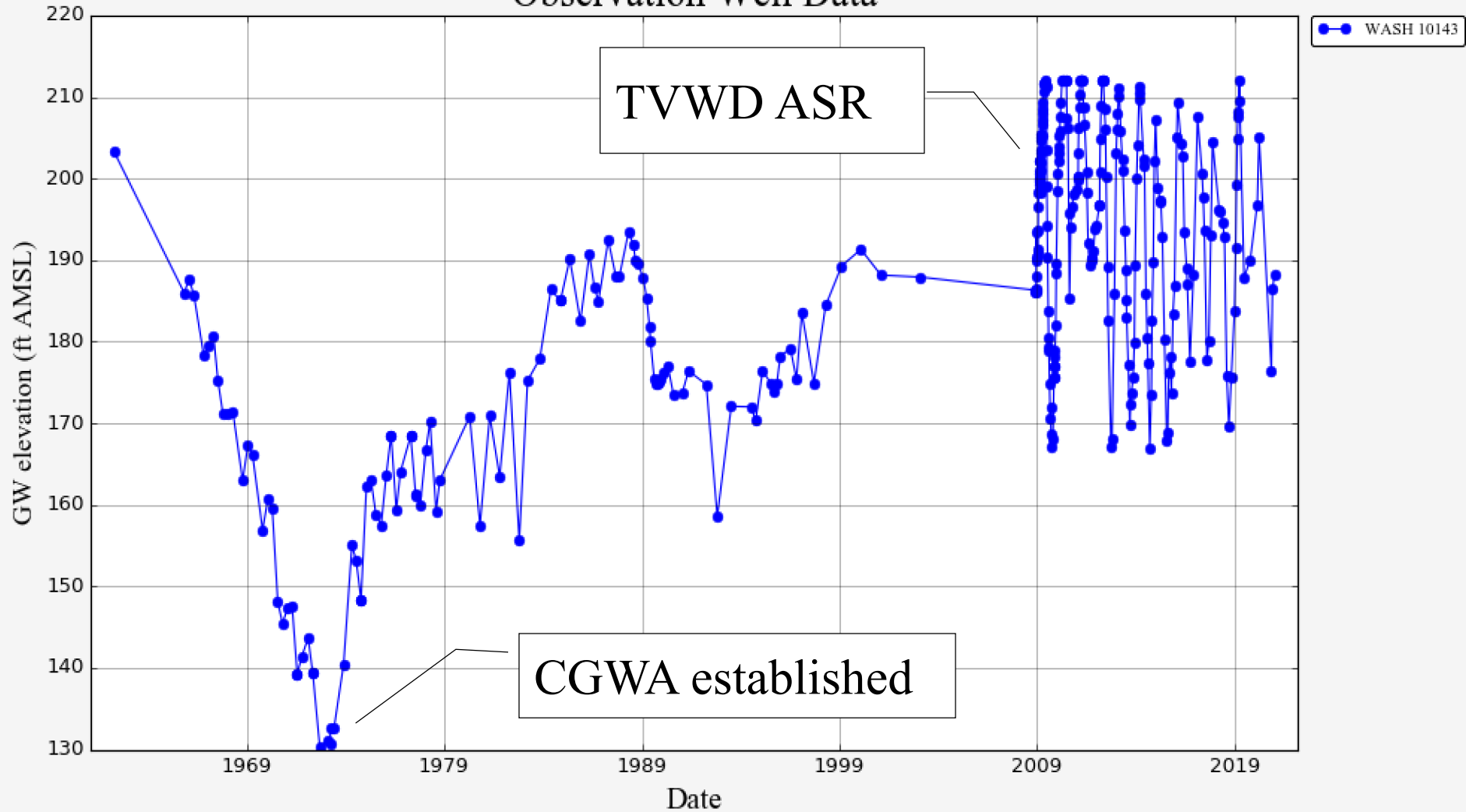


Cooper-Bull Mountain CGWA



Cooper-Bull Mountain CGWA

Observation Well Data



Cooper-Bull Mountain CGWA

	Water Rights	Near Max. Annual Use	CGWA Restriction	ASR Recovery
Date:	pre-1970	1970	1974-76	(2018)
Beaverton	500	310	240	430
Tigard	1490	530	350	100
TVWD*	890	430	220	250
Totals	2870	1270	800	780
% Estimated Sust. Yield	304%	134%	85%	83%

Round volumes presented in millions of gallons (MG) on an annual basis, 1MG ~ 3AF
 *Wolf Lodge Water District and other TVWD predecessors in 1970s

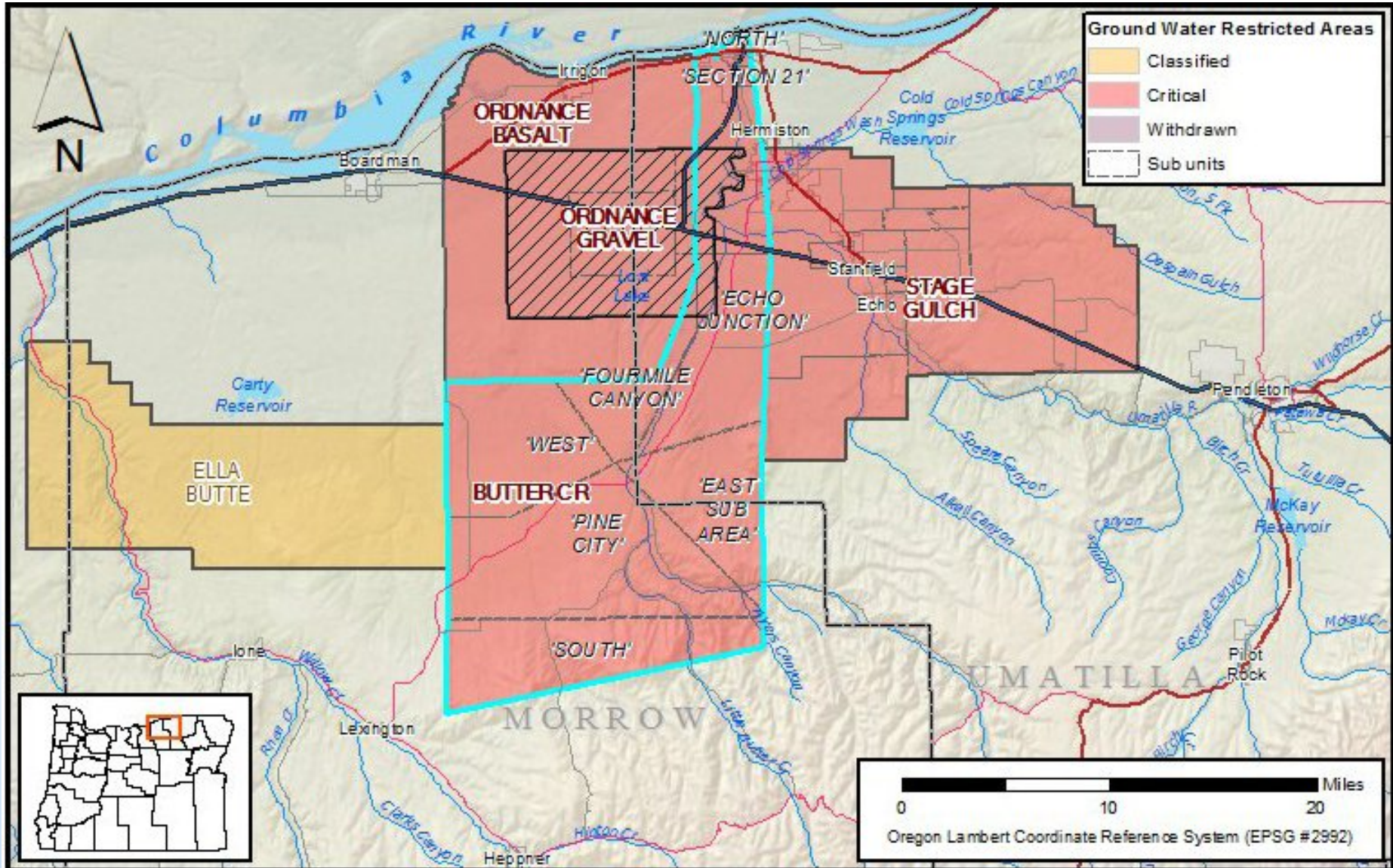
Cooper-Bull Mountain CGWA Summary

Authorized water rights are in excess of sustainable yield, but are largely unused

Large municipal users have developed alternate surface water supplies

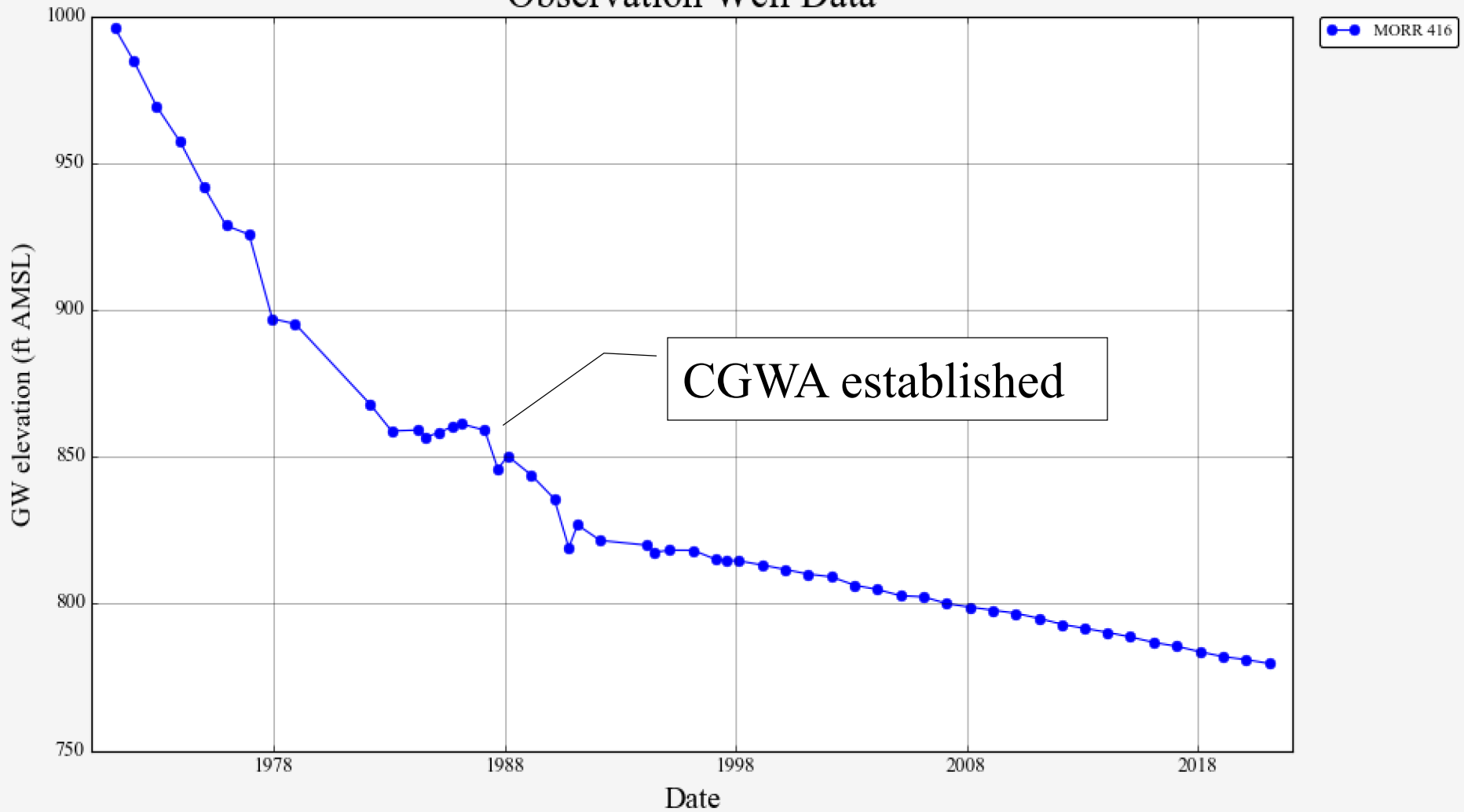
Aquifer Storage and Recovery projects have restored winter water levels to artesian conditions in some areas

Butter Creek CGWA



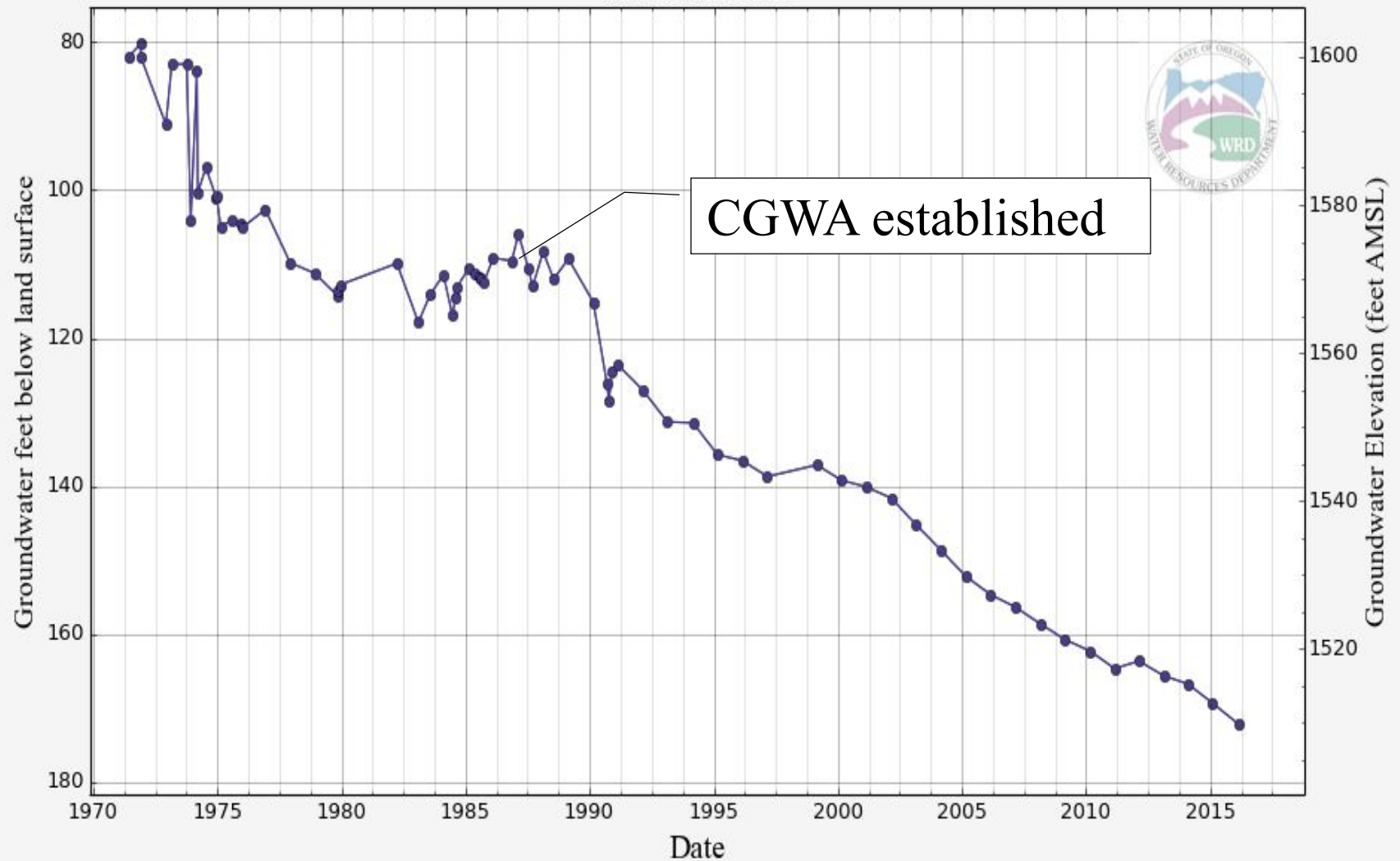
Butter Creek CGWA – Pine City Subarea

Observation Well Data



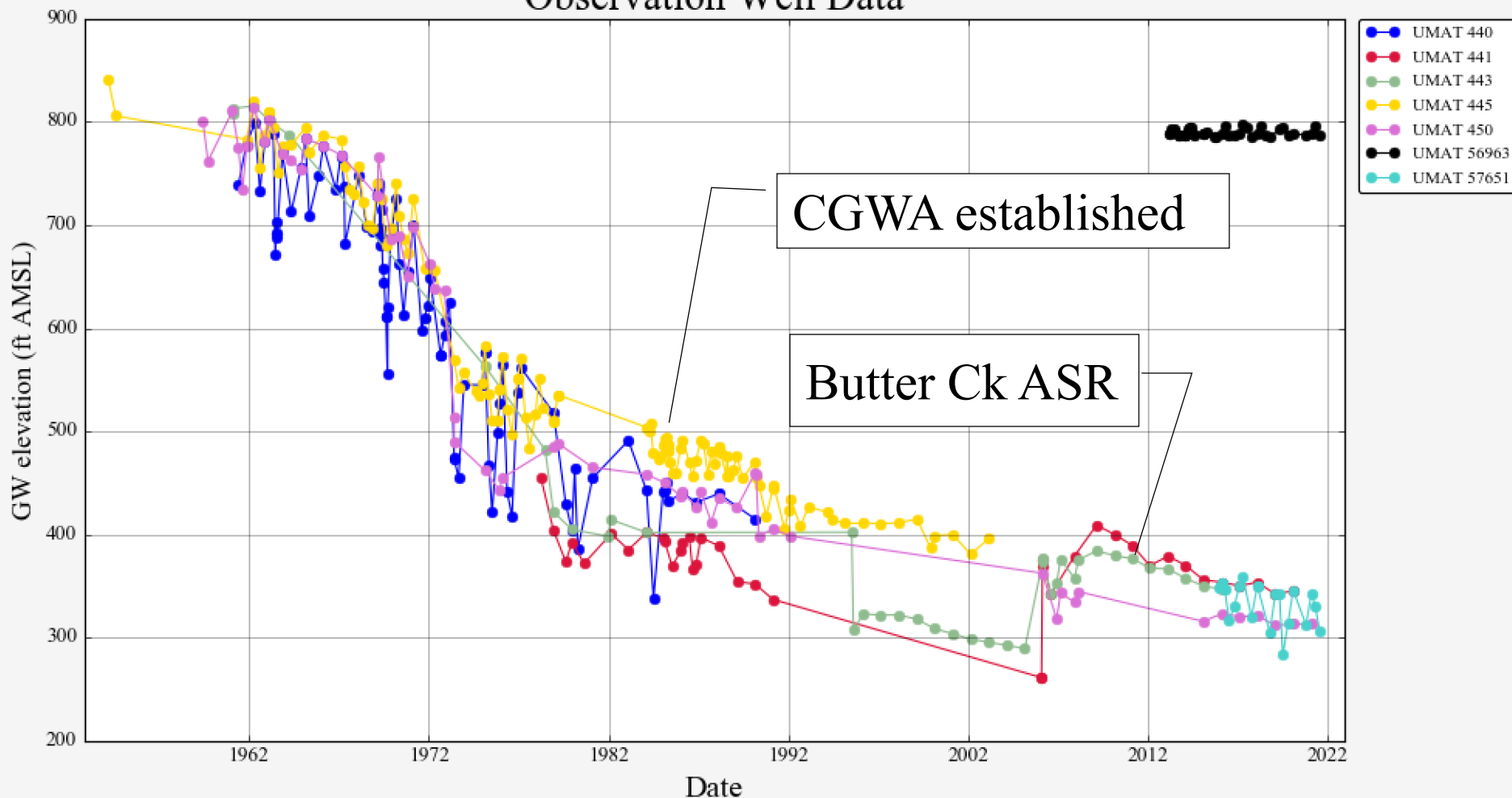
Butter Creek CGWA – South Subarea

MORR 441



Butter Creek CGWA – Echo Jct Subarea

Observation Well Data



Butter Creek CGWA Summary

Managed with annual allocation of “SAY” totaling 14,378 acre-feet to senior users

~63,000 AF of junior water rights that are not able to be exercised are still on the books

Groundwater level declines likely to continue until/unless SAY and subarea boundaries are re-evaluated

Summary of 2021 CGWA Review

Positive CGWA outcomes to date are associated with the availability of alternate water sources, coupled with significant artificial recharge projects.

Recommend the Department:

- Maintain existing CGWA controls
- Re-evaluate controls in areas where groundwater levels continue to decline, as resources allow
- In the future:
 - encourage voluntary agreements, with CGWA backstop
 - build adaptive management into future CGWA rules to meet specified water level trend benchmarks

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