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Sustainable Groundwater Management Act: Update on Subsidence Best Management Practices

Agenda Item at a Glance:

- <u>Subsidence</u>, or the sinking of land, has occurred in California for nearly one hundred years. Pumping a lot of water that is located in the ground, called groundwater, can cause subsidence: when groundwater is pumped out of the ground, it causes the soil to collapse, and the land sinks (subsides). Subsidence can damage homes, roads, bridges, levees, wells, irrigation canals, and water delivery systems. Repairing these damages could cost billions of dollars.
- In July of 2025, the Department of Water Resources, called "DWR," released a report
 with information about how to stop subsidence. The report is called <u>Draft Best</u>
 <u>Management Practices on Managing Land Subsidence in California</u> and is available for
 public comment.
- At this meeting, DWR will present information about their subsidence report. This is an informational item, important to anyone interested in groundwater and subsidence.
- At this meeting, the Commission will receive information from staff at DWR.
 Commissioners can ask questions of presenters and Commission staff. Tribes and the public will have an opportunity to make a comment to the Commission before the Commission discusses this agenda item.

Introduction

Land subsidence is a pressing issue in California. Subsidence has occurred in the State for nearly a century and is having significant impacts to water conveyance infrastructure as well as flood protection, levees, road, wells, and other surface land uses and infrastructure that the State relies on. Repairs to this infrastructure could cost billions of dollars. Subsidence is caused by various factors including excessive groundwater pumping that causes the soil to collapse.

To address the issue of subsidence and support implementation of the Sustainable Groundwater Management Act (SGMA), DWR released the <u>Draft Subsidence Best Management Practice (BMP)</u> on July 24, 2025. The purpose of the Draft Subsidence BMP is to assist local Groundwater Sustainability Agencies (GSAs) in understanding how subsidence occurs, how to monitor conditions, and how best to manage subsidence conditions. A significant intent of the Sustainable Groundwater Management Act (SGMA) is to avoid or minimize subsidence throughout the State.

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DWR staff will present the Draft Subsidence BMP to the Commission at this meeting. DWR seeks input from the public and practitioners on the Draft Subsidence BMP over the <u>60-day public comment period</u>. In addition to presenting the Draft Subsidence BMP to the Commission, DWR will present and solicit feedback from interested parties at three public meetings as required in California Water Code 10729(d)(2).

Background

Land subsidence, or the sinking of land, can be caused by multiple factors, including the dewatering of fine-grained sediments, including clay layers within an aquifer due to groundwater pumping. Aside from impacting the structure of the aquifer itself, subsidence can also significantly impact infrastructure, including water conveyance facilities, pipelines, levees, building, foundations, railways, highways, and bridges. Subsidence from groundwater pumping has severely impacted land surfaces and infrastructure in parts of California. The effects are costing Californians hundreds of millions of dollars annually in damage repairs, reducing water supply reliability, and jeopardizing public safety.

Fortunately, subsidence can be minimized, avoided, or reversed. The subsidence BMP provides a guide on the fundamentals of land subsidence, technical assistance related to subsidence, and best practices for managing subsidence. The subsidence BMP also provides specific information about subsidence in California and how it must be considered within the structure of the Sustainable Groundwater Management Act (SGMA). For example, GSAs will be tasked with establishing subsidence monitoring, identifying affected or at-risk infrastructure, and refining subsidence sustainable management criteria. The Subsidence BMP outlines several general management actions that can help a basin determine subsidence sustainable management criteria. A key to successfully addressing subsidence under SGMA involves evaluating all available information, educating the local community, coordinating with entities responsible for the operation and maintenance of infrastructure, understanding other potential impacts to surface and land uses (e.g., changes in flood risk, depth, or flow pattern), stabilizing and potentially raising groundwater levels, and adaptively managing a basin as conditions change.

This agenda item advances Goal Three of the Commission's <u>Strategic Plan</u>, which calls on the Commission to use its public forum to explore pressing water management issues.

Meeting Overview

At the August meeting, Paul Gosselin, Deputy Director of DWR's Sustainable Water Management Office, Shane Edmunds, Lead of DWR's Groundwater Sustainability Plan Review section, and Tim Godwin, Technical and Policy Advisor for DWR's Sustainable Groundwater Management Office, will present on DWR's <u>Draft Best Management Practices on Managing Land Subsidence in California</u>. The Commission will hear public comment and have an opportunity to ask questions of the presenters to help the Commission and the public understand this issue.

This is an informational item.

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