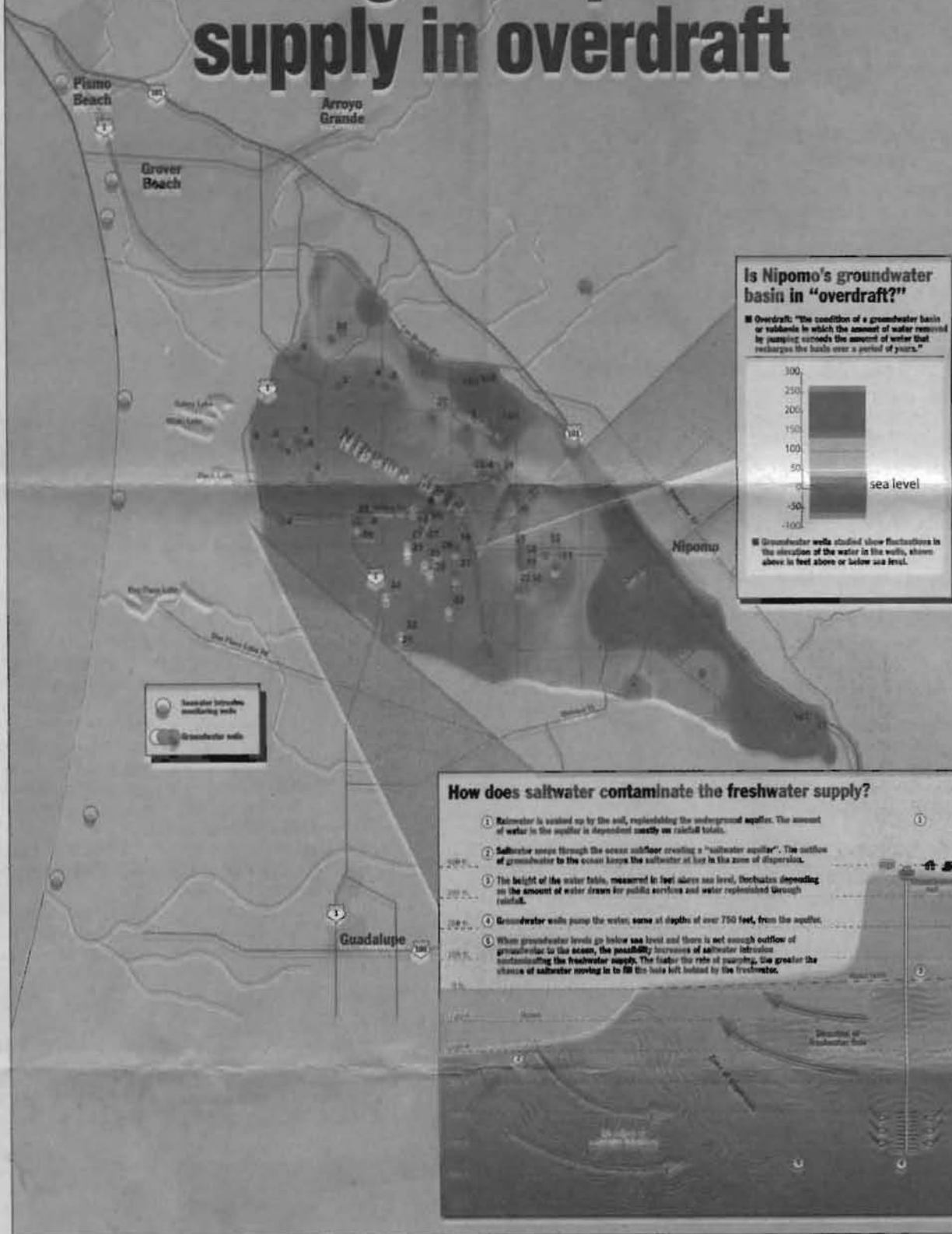


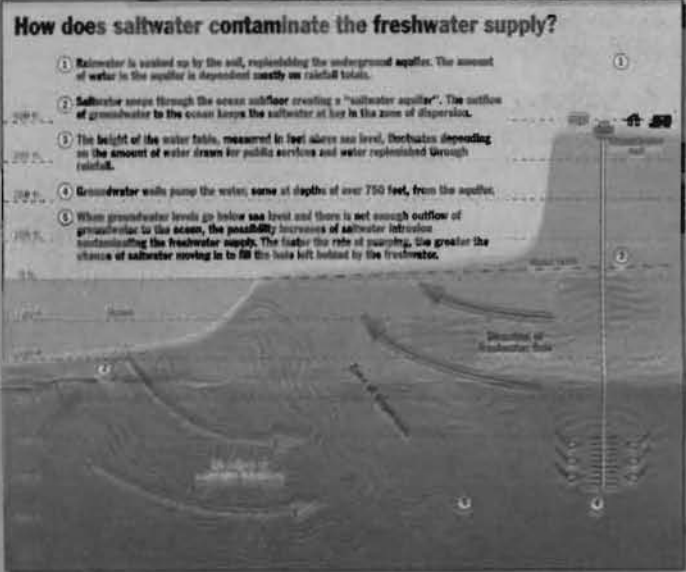
Planners agree Nipomo water supply in overdraft



Is Nipomo's groundwater basin in "overdraft?"

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Commission supports strict conservation

BY TODD CRALLEY
Adobe Press

In a unanimous vote May 24, the San Luis Obispo County Planning Commission backed the Nipomo Community Services District's request that the County Board of Supervisors declare a Severity Level 3 for the Nipomo Mesa water supply and immediately implement strict conservation measures.

A Severity Level 3 means the demand for water meets or exceeds the supply in the groundwater basin

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That can pose a problem because it could allow sea water to intrude on the groundwater basin, which could ruin the quality of the water supply.

The volume of groundwater in storage above sea level last month was determined to be 90,000 acre-feet, a drop of 12,000 acre-feet from last year's total of 102,000 acre-feet, and that has some concerned.

"The biggest concern is the dramatic drop in storage over the last 12 months shows how vulnerable we are," said Bruce Buel, NCSA general

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■ But tests show well levels are dropping

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The vote is in direct response to an NCSD-commissioned report by Science Applications International Corp. that shows several wells tested in April in the Nipomo Mesa Management Area have been pumping water from below sea level.

It's those depressions in the underground aquifer that concern NCSD directors. Eight of the 63 wells tested were drawing water from below sea level, according to the report.

While there is no sign of sea water intrusion into the underground aquifer, NCSD officials are concerned

about the wells pumping water from below sea-level.

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"The biggest concern is, the dramatic drop in storage over the last 12 months shows how vulnerable we are," said Bruce Buel, NCSD general manager.

A substantial lack of rainfall in the area has had an effect on the amount of water that normally recharges the underground aquifer. There has been a 40-percent decrease in the amount of rain this year.

Typically, Nipomo receives about 16 inches of precipitation a year. This year's total of just over six inches falls well short of a normal year.

NCSD is committed to managing the water wisely.

See **OVERDRAFT** / A8

Groundwater shows no salt water intrusion

■ But tests show well levels are dropping

BY TODD CRALLEY
Adobe Press

Nipomo's groundwater is free from sea water incursion, according to a comprehensive study commissioned this spring by the Nipomo Community Services District.

The amount of fresh water in Nipomo's underground water basin is uncertain, and if it drops too far, salt water could flow underground from the ocean, possibly fouling wells.

Science Applications Interna-

See **SALT** / A8

Overdraft: NCS D seeking help with monitoring

Continued from A1

"Water is our single greatest resource," said Mike Winn, board president. "If they start pumping salt water out of those wells, farming on the Mesa is through. Think of the greenhouses. They'd be ruined. Those flowers go not just locally but all over the country, and some ship around the world."

The Planning Commission also agreed areas outside the urban reserve line, those areas of Nipomo that are truly rural and not served by NCS D, should be charged for the cost of securing a supplemental water supply.

"Until a supplemental water in-lieu fee is in place, the county should not be approving divisions of land outside the urban resource line," Buel said. "In particular, you don't want development occurring in rural areas without the mechanism in place to bill them for the sup-

Acre-foot?

■ An acre-foot is equal to about 326,000 gallons, or enough to meet the average yearly water needs of two families of three in most urban settings.

plemental water."

Said Winn, "The Planning Commission's recommendation to the Board of Supervisors is that they stop processing outside the (urban reserve line) until they know what that fee will be."

NCS D charges a \$12,000 fee for supplemental water for each water meter it agrees to serve.

"Outside the urban resource line, I can't charge them \$12,000," Buel said. "Before new development is approved, the county must change that."

NCS D is also seeking assistance from the county in monitoring the wells, because cer-

tain constraints have been identified by the district.

"Getting to the wells is often a difficult process, because there are permits and endangered species," said Jon Seitz, NCS D legal counsel. "We're asking the county to contribute to the process of monitoring the wells on a regular basis."

NCS D wants to use an electronic monitoring system that is capable of checking the wells hourly.

Planning Commissioner Sarah Christie said it is better to act now before it is too late.

"It's better that we address this concern now," she said. "The Nipomo Community Service District knows what's best for the Nipomo area. They have hired professionals to complete this study. We should act now before we regret not acting in the future."

Todd Cralley can be reached at 347-4580 or tcralley@theadobeypress.com.

Salt: Testing indicates no intrusion of sea water

Continued from A1

tional Corp., a Carpinteria-based water resources engineering firm, tested three wells for water quality in the new study, which was presented at last week's NCS D meeting.

Along the western edge of the Nipomo Mesa Management Area, the freshwater wells are known as the "sentinel wells." They are 200, 400 and 700 feet deep, according to the report, and are just west of the ConocoPhillips refinery and just inland from the ocean.

"Testing of the sentinel wells indicates no intrusion of sea water," said Brad Newton of Science Applications International Corp. "This is good news. There has been no change over a 30-year period."

Newton also indicated that the wells, last tested in 1995,

seem healthy.

"The hydrology of these wells shows significant flow to the ocean — and that's during a dry year — which indicates that there is enough flow to keep salt water from intruding into the groundwater," he said.

"We can summarize that there is no evidence of sea water intrusion into the groundwater aquifer under the Nipomo Mesa."

Ideally, Newton said, the sentinel wells should be tested annually to guard against salt water intrusion.

The second phase of the report was to determine the amount of groundwater under the Nipomo Mesa Management Area based on groundwater elevation data collected in 2000, 2006 and 2007.

In all, 63 wells throughout the Mesa area were tested.

The data will be used to create a monitoring program where wells are measured and tested regularly to determine the amount of water in underground storage.

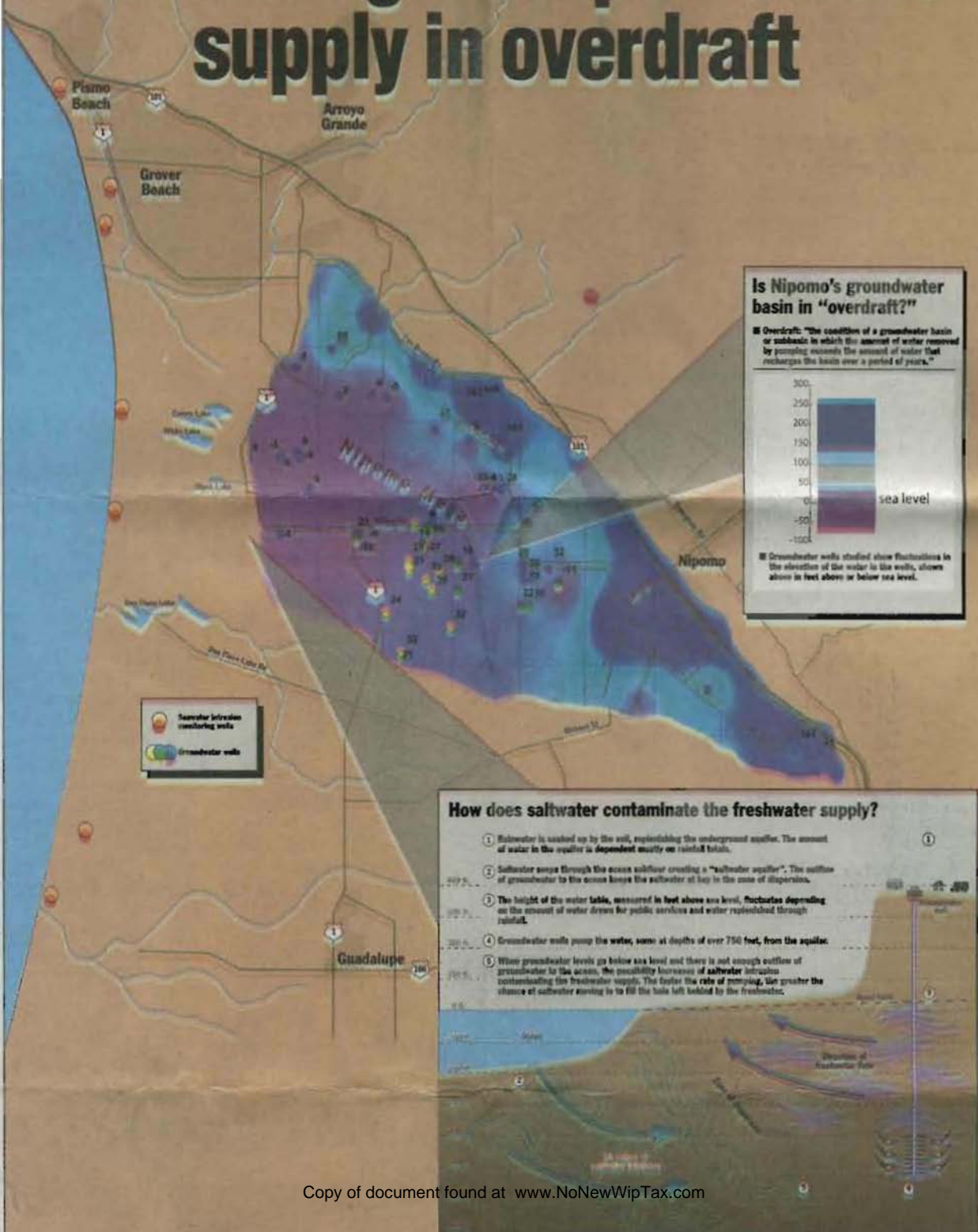
The results of the initial analysis indicate the volume of groundwater in storage above sea level for the current year is 90,000 acre-feet, down from the measured volume of 102,000 acre-feet in 2006 and 100,000 acre-feet in 2000.

On average, the groundwater elevations have dropped seven feet from April 2006 to April 2007 when comparing water elevations taken at the same wells.

During the 2007 water year, rainfall was approximately 40 percent of normal in San Luis Obispo and Santa Barbara counties.

Todd Cralley can be reached at 347-4580.

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Seawater intrusion monitoring wells

Groundwater wells

How does saltwater contaminate the freshwater supply?

- 1 Saltwater is washed up by the soil, establishing the underground aquifer. The amount of water in the aquifer is dependent mostly on rainfall totals.
- 2 Saltwater seeps through the ocean subfloor creating a "saltwater aquifer". The outline of groundwater to the ocean keeps the saltwater at bay in the zone of dispersion.
- 3 The height of the water table, measured in feet above sea level, fluctuates depending on the amount of water drawn for public services and water replenished through rainfall.
- 4 Groundwater wells pump the water, some at depths of over 750 feet, from the aquifer.
- 5 When groundwater levels go below sea level and there is not enough outflow of groundwater to the ocean, the possibility increases of saltwater intrusion contaminating the freshwater supply. The faster the rate of pumping, the greater the chance of saltwater moving in to fill the hole left behind by the freshwater.