SAND CITY

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### **EXHIBIT 3-H**

January 5, 2005

Mr. David Berger General Manager MPWMD 5 Harris Court, Building G Monterey, California 93942

Dear Dave:

As requested by your letter of October 5, 2004, the Sand City Council has determined that a "general plan build-out" estimate of future commercial/industrial and residential development would yield a water supply requirement of approximately 449 acre-fect per year (AFY) for Sand City.

On January 4, 2005, the City Council considered city staff analysis of various General Plan build-out scenarios to determine future water need for our city (see enclosure). The Council determined that a "scenario 5" (a hybrid of scenario 1 and 4) should be the recommended methodology the district uses to determine Sand City's long-range water needs based on general plan build-out. The Council determined that it was reasonable to assume that a total of 587 dwellings would eventually exist in Sand City, needing an average of .16 AFY of water per dwelling, resulting in a total water need of 187 AFY. The Council also determined that it would be reasonable to assume a commercial build-out figure of 3 million square feet. Using an average of 28.4 gallons/square foot of commercial floor area, based on a three-year average derived from Cal-Am figures, this would yield a total water use of 262 AFY. Therefore, the cumulative total of residential and commercial water needs would equal 449 AFY. You will note from the 3-year average of water use per resident in Sand City that we are a very water-conserving community. This is largely due to our relatively small average household size (2.46 persons per household) and small lot size for residential development.

For purposes of our planned water supply project, Sand City staff further refined theoretical water use parameters generated by general plan build-out based on: (1) real estate market conditions; (2) existing development by field survey ("ground-truthing"), and (3) the constraints to reaching general plan build-out, such as poor lotting patterns, existing development that is not ripe for redevelopment, and the lack of off-street parking opportunities needed to maximize commercial and mixed use development.

If your staff needs further assistance regarding how we derived our "numbers", please contact me at 394-6700 x 13.

Sincerely,

Steve Matarazzo Community Development Director

C: City Administrator

Enclosures:

Incorporated May 31, 1960

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City Hall 1 Sylvan Park, Sand City, CA 93955

Administration (831) 394-3054

Planning (831) 394-6700

FAX (831) 394-2472

Police (831) 394-1451

FAX (831) 394-1038

Public Works (831) 394-1386

FAX (831) 394-8518

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### CITY OF SAND CITY staff memorandum

# DATE: December 15, 2004 (for Council Meeting of January 4, 2005)

TO: Mayor and City Council

FROM: C

Community Development Director

SUBJECT: Request by Water District for Sand City's Long Term Water Needs Using General Plan "Build-out" Projections

## BACKGROUND

On October 5, 2004, the water district manager requested that each jurisdiction provide its long-term water needs to the district. The long-term water needs were to be based on "general plan build-out" figures regarding projected amounts of residential, commercial and industrial development. It is presumed the district will use these figures in its future water planning efforts in concert with the development of the Moss Landing regional desalination facility, although that intent was not directly stated in the district correspondence.

General plan "build-out", as defined by the planning community, usually signifies the amount of development that would be allowed provided maximum densities and intensities of land use, in accordance with the adopted general plan are eventually realized over time. Sand City staff estimated this amount of residential and non-residential development as part of the adopted 2002 - 2017 General Plan, and those figures are provided on a chart within the Land Use Element. It is recognized that these numbers are a worst-case theoretical scenario and probably will never be realized, particularly within the West End district of town due to the small lotting patterns and the lack of available off-street parking opportunities. (For example, maximum floor area ratios were presumed with development densities allowing 5 stories of height for all properties within the West End. Recent development, due to the lack of available lot area to meet parking requirements, has resulted in 2-story construction, even though up to 5 stories (60 ft height limit) is allowed by zoning..

For water planning purposes related to our proposed water project, Sand City staff (public works and planning) further refined the estimates of future development based on current market trends (which favor residential development in the West End mixed use district), the lack of parking available, and "reasonable expectations" of density based on the physical constraints of Sand City in terms of sensitive habitat, regional policy (coastal commission review), and existing lotting patterns. Based on this "realistic" scenario, it is estimated that Sand City will eventually need 312 acre-feet of water (see Scenario 4 on attachment 1). The Sand City water supply project (desalination plant) will have a design capacity of 300 acre-feet per year.

## CONCLUSION AND RECOMMENDATION

Four development scenarios, based on reasonable and "theoretical" general plan development are provided for the Council's review in attachment 1. It is RECOMMENDED that staff forward all this information to the water district for their review, and recommend that district staff modify our general plan theoretical build-out figures estimated by "Scenario 4". In this way, any future water supply will be based on realistic water needs, rather than theoretical needs that may never be attained, resulting in unnecessary regional water infrastructure capacity and cost. Based on this principle, it is FURTHER RECOMMENDED that Sand City request a future water need of 312 acrefeet per year, with a 20 percent contingency amount.

Attachments: 1:

2:

Sand City General Plan Build-out Scenarios Draft Letter to Water District Manager



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### ATTACHMENT 1

# Sand City General Plan "Build-Out"\* Based on the 2002 - 2017 General Plan and the State-Certified 2003 Housing Element

1. Estimated Dwellings:

587 units (all small, small lot residential/multi-family densities)

2. Non-Residential: (1 to 3 million square feet, depending upon market demand for residential development in the West End (mixed-use zoning) district.

### Scenario 1:

<u>Potential Water Use @ General Plan Build-Out with</u> <u>1 million square feet of Additional Commercial Development</u> (Realistic General Plan Build-out based on Existing Market Conditions Favoring Residential Development in the West End)

## **Residential Land Use:**

Estimated Water Use of 587 units @ .16 AF/unit = 187 AFY

#### **Non-Residential Use**

@ 1 million square feet @ .00007 AF/sf = 70 AFY
@ 3 million square feet @ .00007 AF/sf = 210AFY (includes existing commercial square-footage)

Total Water Need (by use of District Water Multipliers (factors):

Existing Water Use:118 AFY (2003 figures from Cal-Am)New Residential:187 AFYNew Commercial:70 AFY

Total:

375 AFY\* (this total includes 133 housing units of a coastal project that is the subject of litigation and has its own water supply via a private mutual water company, if eventually approved.)

Scenario 2:

Potential Water Use @ General Plan Buildout with

High-end number of New Commercial Development (2) (Possible General Plan Build-out Based on Lack of Commercial Competition From the Former Fort-Ord Build-out)

Existing Water Use:118 AFY (2003 Figure from Cal-Am)New Residential:187New Commercial:210

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"Scenario 2" Total 515 AFY(2) (This total includes 133 housing units that may not get built due to litigation and/or may have a water supply that is provided via a private mutual water company outside the service area of Cal-Am. Also, this figure is very liberal as it assumes enough parking will be provided in the West End district, requiring the construction of numerous parking structures.)

## <u>Scenario 3</u>:

Estimated Water Use Based on "Holding Capacity" of General Plan Related To Commercial/Industrial Usage: (Unrealistic based on lack of parking and market demand for residential development -current market trends do not support.)

Water Use From Residential (does not change) = 305 acre-feet per year (based on District water use factors)

Water Use Needed for Industrial/Commercial (based on 9 mill. square feet) = 630 acre-feet per year

Total Water Needed: 935 acre-feet per year

Scenario 4: Estimated Future Water Use Based on Actual Use Factors

Projected General Plan Build-Out Population:

1,029 residents @ 43.8 gals/person/day (3 year average, 2001 to 2003) = 50 afy

Commercial/Industrial Water Use (based on 3 year average):

@ 3 million square feet @ 28.4 gals/sf = 262 afy (market-based figure, given lack of parking available)

Total Projected Use Assuming Max. Commercial Dev.

312 Acre-Feet/Year

\*The Land use chart in the adopted General Plan refers to "holding capacity", which is different from realistic "build-out" that can be estimated using current real estate market trends and projected land utilization based on existing parcel sizes and the lack of in-fill opportunities in Sand City due to a lack of off-street parking opportunities.