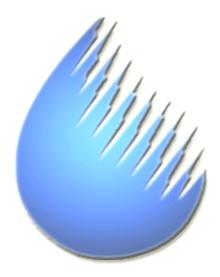


#### **Southern Nevada Water Authority**



## Legislative Committee to Study the Use, Management and Allocation of Water (SCR 26)

May 24, 2006

EXHIBIT D - WATER RESOURCES Document consists of 24 slides.

⊠Entire document provided.

Meeting Date: May 24, 2006



#### **Integrated Water Planning Advisory Committee**

- Formed by the SNWA Board in June 2004
- Assessed alternatives and developed general recommendations concerning the integration of in-state water resources into the water planning and management activities of Southern Nevada



- Developed 22 recommendations in four categories:
  - Conservation
  - Resource Development
  - Resource Management
  - Funding
- Presented recommendations to the SNWA Board of Directors in November 2006 for consideration and implementation



#### **SNWA Conservation Initiatives**

#### **IWPAC Conservation Recommendations:**

- Decrease demand from 272 GPCD to 250 GPCD by 2010 and to 245 GPCD by 2035
  - Make permanent the major demand reduction tools in the SNWA Drought Plan
  - Ensure that water rates keep pace with inflation
  - Maintain / exceed 2004 participation in WSL Program
- Promote water conservation more aggressively and regulate water use through methods such as the reduction of turf
- Assess conservation levels annually and investigate potential for further GPCD reduction





#### **SNWA Conservation Initiatives**

#### On April 20, 2006, the SNWA Board:

- Made the Water Smart Landscapes incentive \$1 per square foot for all conversions, regardless of total square footage
- Removed the \$300,000 limit on rebates
- Directed staff to pursue an alternative funding mechanism to assist schools and government with landscape conversions
- Directed staff to work with member agencies to make the Drought Plan's major demand reduction tools permanent









## **Seven States Proposal**

- Submitted in Feb. 2006 for inclusion in the environmental process
- Consensus document recommended by all seven states
- First comprehensive proposal for the operation of the entire Colorado River system, includes provisions for
  - Coordinated operation of lakes Powell & Mead
  - Intentionally Created Surpluses, Extraordinary Conservation Projects & System Efficiency Projects
  - Non-Colorado River System Water Exchanges
  - Tributary Conservation
- The states have agreed to allow Nevada to fund the All American Canal Drop 2 Reservoir Project, which would allow Nevada to take about 280,000 to 300,000 acre-feet of ICS credits



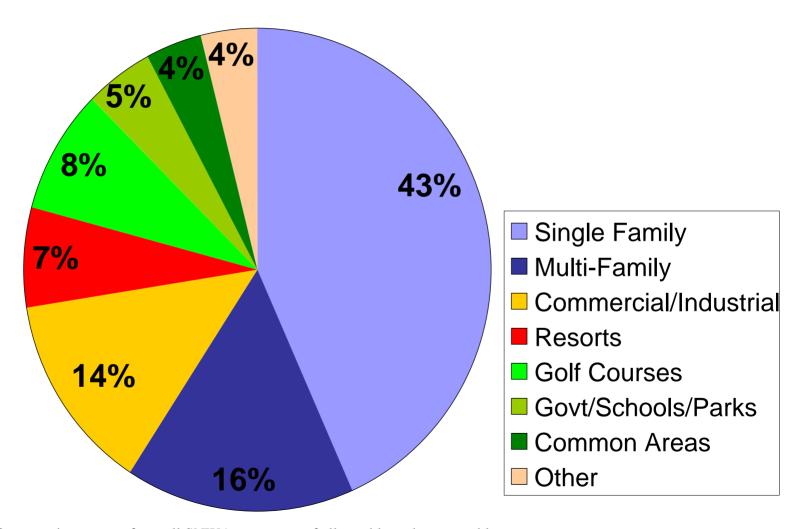


#### White Pine County Negotiations

- In 2006, the White Pine County Commission established a team to meet with SNWA to discuss its groundwater development project
- Development and approval of two documents are pending:
  - Memorandum of Understanding
  - Cooperative Agreement
- The proposed Cooperative Agreement addresses three key areas:
  - Establishment of an Environmental Protection Plan
  - Establishment of a Management Committee comprised of SNWA & White Pine County representatives
  - Reservation of water and financial considerations
- On May 10, 2006, the White Pine County Commission voted to postpone its 5/19 meeting with SNWA in order to hold a public forum to discuss the draft proposal



#### Where's the Water Used?

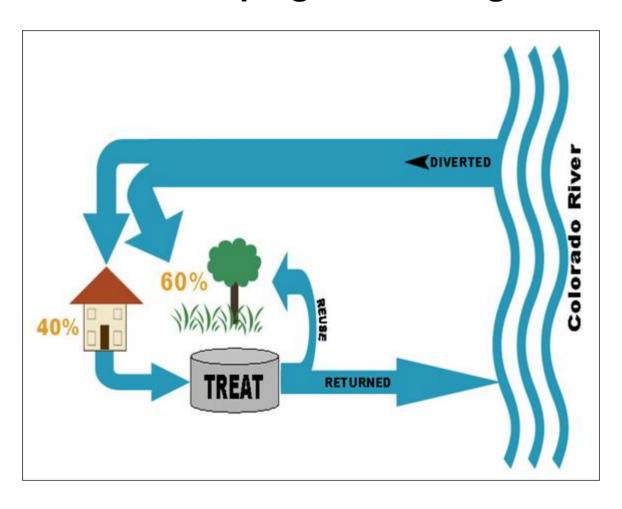


2003 metered water use from all SNWA purveyors of all potable and non-potable water



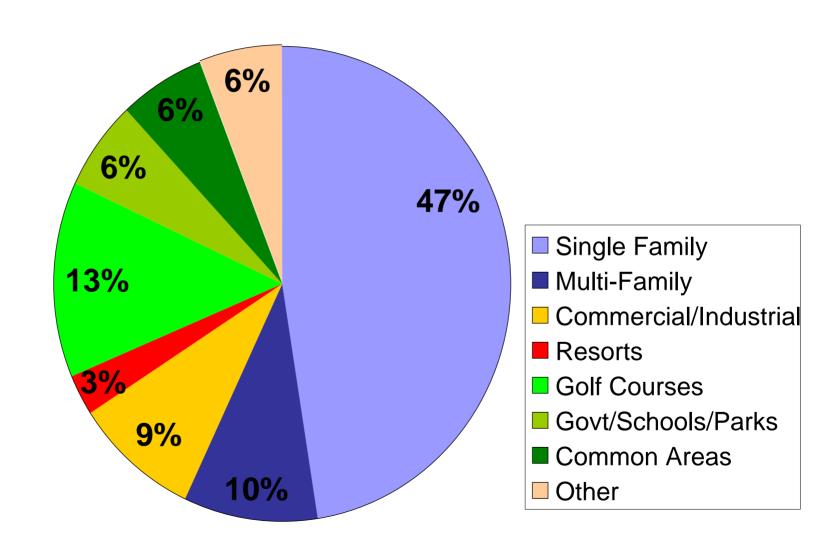
#### **Return Flow Credits**

## Colorado River water is <u>consumed</u> primarily by landscaping and cooling





#### Where's It Used Outdoors?





#### **Overview**

#### Conservation in Southern Nevada is influenced by:

- Policy
- Pricing
- Incentives
- Education and Outreach

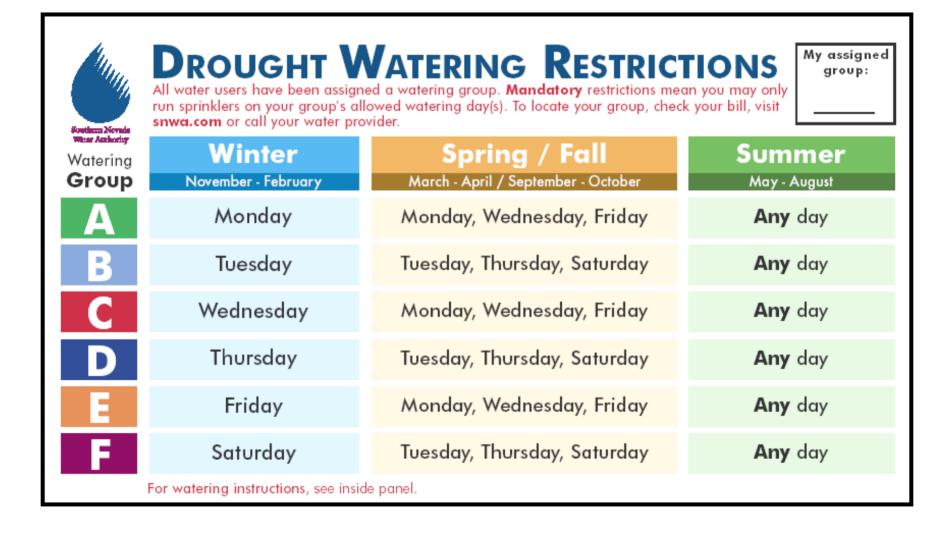


#### **Demand Reduction Tools**

- Development codes (commercial & residential)
  - Indoor fixtures (for example, low flow devices)
  - Outdoor landscaping, misting systems and fountains
- Time-of-day and day-of-week watering restrictions
- Water budgets for golf courses
- Water efficiency plans for resorts
- Penalties for wasting water



#### **Watering Restrictions**





#### **Golf Course Water Budgets**

# Golf Courses are required to adhere to a water budget and submit water use reduction plans.



**Before Conversion** 



**After Conversion** 

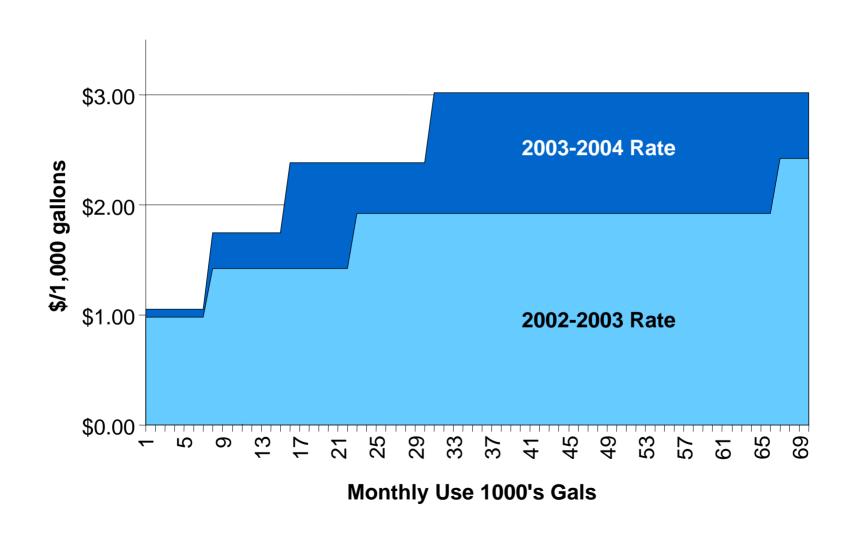


### **Pricing**

- SNWA member agencies utilize tiered rate structures.
- These structures target high water users, while protecting the rates for the smallest users.
- The lowest tier represents what most customers use indoors.



#### Tiered Pricing Encourages Conservation





#### **Incentive Programs**

Southern Nevada recycles nearly every drop of water that is used indoors. That's why SNWA conservation programs focus on outdoor water use.

- Water Smart Landscapes
- Smart Clock Coupon
- Rain Sensor Coupon
- Pool Cover Coupon
- Water Efficient Technologies
- Water Smart Car Wash
- Water Smart Contractor
- Water Smart Home





#### Water Smart Landscapes Program

- Instituted in 1999
- Provides rebates to customers that replace turf with water-smart landscaping
- Over 70 million square-feet converted since program inception
- Over 3.8 <u>billion</u> gallons saved annually



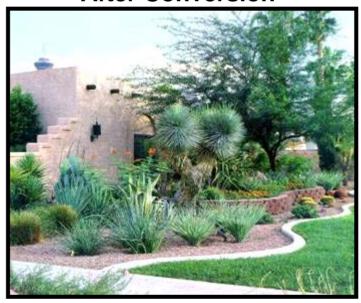
#### Water Smart Landscapes Program

# Since 1999, the equivalent of over 1,200 football fields of decorative turf have been converted

**Before Conversion** 



**After Conversion** 





#### **Water Smart Landscapes Program**



Since the program's inception, the Southern Nevada Water Authority has rebated about \$56 million



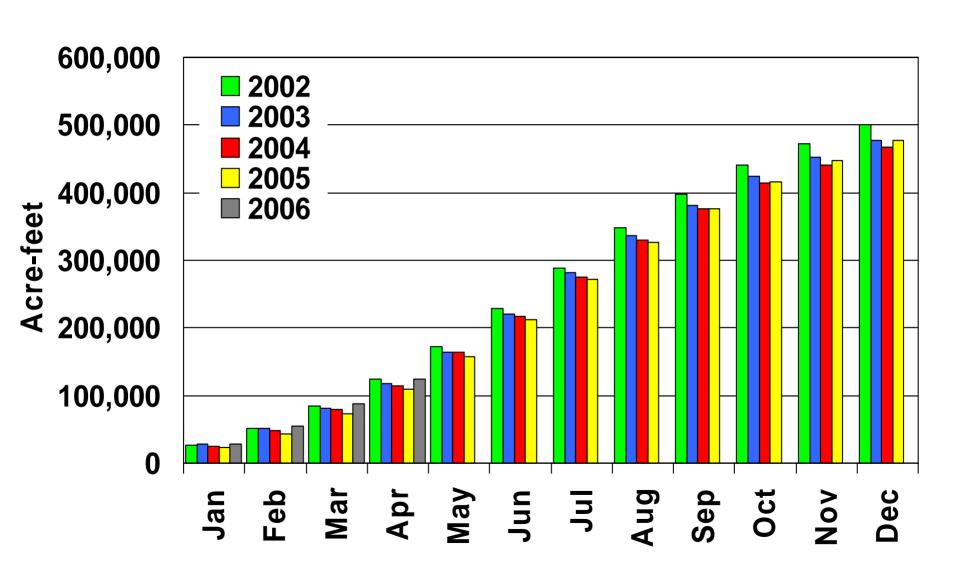
#### **Education and Outreach**

- Advertising and media
- Speaker's Bureau
- Helpline (258-SAVE)
- Public events
- SNWA.com
- Youth programs
- Demonstration gardens





## Comparison of SNWA Cumulative Water Use (2002 to 2006)

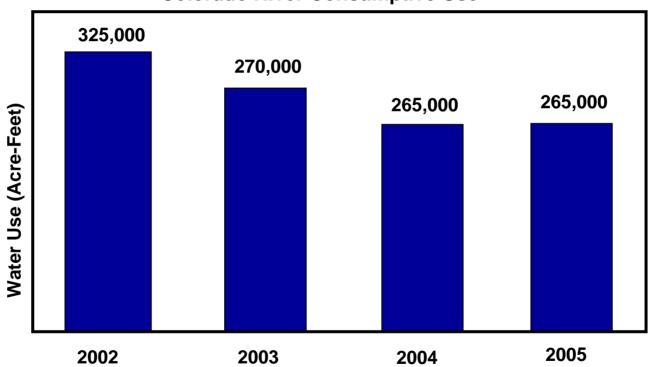




#### Water Conservation & Drought Response

# Southern Nevada has made significant conservation gains.

**Colorado River Consumptive Use** 



Water use decreased by an estimated 20 billion gallons between 2002 and 2005, despite the addition of nearly 250,000 new residents and 38 million annual visitors.



#### **The Bottom Line**

Conservation will continue to play a significant role in water management activities for Southern Nevada.



