

Growth and Development Issue

CURRENTS

January 2003

current water info for high schools



Welcome
 ...to the first issue of our *Currents* newsletter! Each issue will focus on a different aspect related to our water resources. In other words, *Currents* is all about water and how important it is to us. *Currents* is designed and written especially for high school students. We have tried to provide you with an interesting way to increase your awareness and respect for Florida's precious water resources. Let *Currents* make a splash in your life today!

This issue of *Currents* focuses on growth and development. All the articles and activities are designed to help you learn more about how growth and development can impact an area and the importance of protecting our natural resources.

Southwest Florida Water Management District
 WaterMatters.org • 1-800-423-1476



Introduction

Have you heard people say that Florida's tremendous growth and development may someday cause our state to sink? This may be a ridiculous statement, but growth and development can impact our natural resources. During the past several decades, Florida has been experiencing tremendous growth spurts that are expected to continue well into our future. To get a sense of how much growth and development is occurring, look around your neighborhood and business area. Perhaps without realizing it, you have witnessed many changes during the past few years. Wooded areas, wetlands and ponds may appear to have shrunk in number and size. You may have noticed that more houses and apartments have *popped up* within

mazes of newly paved streets and avenues. There may be more restaurants, stores, banks, schools and businesses appearing along main roads and highways. You may have also noticed additional cars, trucks and school buses commuting on the network of roads. These are just a few of the many signs of growth and development in an area. Our state has become a popular place. In fact, it is currently the nation's fourth most populated state. Unfortunately, Florida's rapid growth and development creates challenges for maintaining the health and quality of our natural resources. An influx of additional people raises the demand

for water and other basic necessities that rely on natural resources. It is predicted that our state will continue to become more populated, and developments will occupy land that once provided natural habitat and recharge areas for our aquifers. We must work hard to share and conserve our resources and to protect our natural environment for all our living creatures, great and small.

Saving water is my passion

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Currently Wondering



Question:

Should I be concerned about Florida's rate of population growth and development?

Answer:

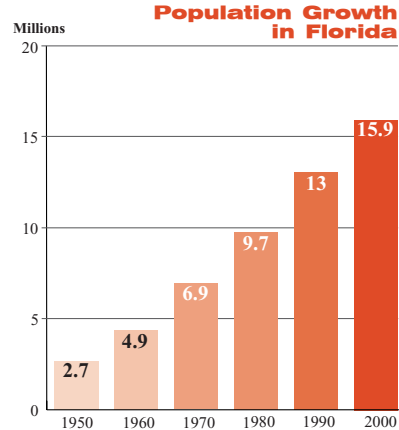
Yes. We all need to be aware of the challenges we face due to the rapid increase in population and development. Here are some things you can do to help:

- Practice water conservation
- Don't be a polluter
- Recycle materials whenever possible
- Appreciate and protect our natural resources
- Encourage others to do all of the above



Growing by Leaps and Bounds

The population of our state has been growing by leaps and bounds over the past several decades. In fact, the number of permanent residents in Florida more than doubled between 1970 and 1995. According to the 2000 U.S. Census, there are almost 16 million people who consider Florida their home. This increase in population places a lot of stress on our state's natural resources. More and more people are becoming dependent on a limited amount of resources.



Interpret the Graph and Take the Population Quiz

Analyze the population pattern created during the past 50 years. Then test yourself by taking the population quiz. For each statement, circle True or False.

1. The population almost doubled from 1950 to 1980. T F
2. Following the trend, there will be less than 15 million people in 2010. T F
3. The population in 2000 increased by about 50 percent from 1960. T F
4. There were almost 10 million people living in Florida in 1980. T F
5. The largest population increase occurred between 1980 and 1990. T F

For answers, see page 4.

Media Reprint

"Water Collection" Grows With Grant Assistance

Excerpted from *Water Management Monthly*, April 2002
A publication of the Southwest Florida Water Management District

One of the District's community education grants has been used to help expand the "Water Collection" at the Tampa-Hillsborough County Public Library System. The grant was used to purchase new resources, such as books and videos about water resources and related issues. These resources have been added to the library system's existing "Water Collection." The materials are also available to the surrounding west-central Florida counties via interlibrary loan.

The "Water Collection" includes materials suitable for all educational levels, from children to professionals. The idea is that the public will use these materials to learn more about our water resources and related issues. In addition, people can use that knowledge to take personal action, engage in community dialogue and participate in a public process that will result in a cleaner environment, a healthier and happier community, and improved decision-making.

The new materials for the "Water



Collection" were purchased by the League of Women Voters of Hillsborough County, who applied for and received a 2001 Community Education Grant from the District's Hillsborough River Basin Board.

The League of Women Voters is a nonpartisan political organization of men and women that encourages citizens to play an informed and active role in government. The League works to increase understanding of major public policy issues and influence public policy through education and advocacy at the local, state and national levels.

The Florida Institute of Government at the University of South Florida, the Pinellas Public Library Cooperative and the Pasco County Library System are also resource partners in this project.

If you are interested in learning more about the "Water Collection" resources, you can call the Tampa-Hillsborough County Public Library System at (813) 273-3652, or log onto the library system's Web site at www.hcplc.org or the interlibrary loan Web site at alleycat.tbcl.org.

What Do You Think?

1. Why is a library a good source for materials on water resources?

2. How can books on water resources help address the effects of growth and development in an area?

3. Which library can you contact to find out about water resources in your area?

Mapping Growth and Development in My Neighborhood



Background

This activity will help you become aware of the changes that have occurred in your neighborhood since you were born. Ask your parents, neighbors, school officials and others about how the land in the area was used years ago. Questions may include the following: What did the area of land look like? How many stores, restaurants and businesses were in the area? Were there many houses, town homes or apartment complexes? Did forests, wetlands, creeks or other natural areas exist? After gathering information about your area, you will develop two maps to illustrate how the land was used in the past and how it is used now. You may be surprised at the changes. For an extra challenge, develop a third map to show what you think the area will be like in the year 2050.

Learning Goals

- To develop an awareness of how a geographical area can change over time.
- To stimulate thought about the interactions of people and their physical environment.

Subjects

- Science
- Social Studies
- Mathematics
- The Arts

Materials

- Two or three large sheets of paper
- Colored markers or paints
- Pens and pencils
- Ruler

Activity

1. Decide on the boundaries of the geographical area your maps will cover. This may include an area as small as one square mile or an area much larger, depending on the amount of growth and development near your home or school.
2. Create a map of this area and include natural features and symbols representing the constructed buildings that exist today. Include a scale of miles, a key to symbols and a title for this map.
3. Research the area to find out how this area of land was used at the time when you were born.
4. Create a second map of this area and include natural features and man-made structures that existed at the time of your birth. Don't forget to include a scale of miles, a key to symbols and a title for this map.
5. Compare the two maps and summarize the differences.
6. Predict the future by developing a third map to show what the area may look like in the year 2050.

Discussion Questions

1. How would you describe the changes that have taken place in the area since you were born?
2. What affect do you think these changes have had on the environment?
3. How has the land been altered to accommodate the increase in population or development of the area?
4. What do you predict the area will look like in the year 2050? In what ways can people prepare for the changes?

Aerial view of rivers



Improvements



Future



Students' Corner

Word Scramble

Unscramble the letters to form words. Then use these words to complete the paragraph.

We **CAN** keep our environment clean and healthy



rutlaan

tilter

opplee

pmentodevle

Complete this paragraph with the unscrambled words:

An increase in population and _____ usually has direct effects on a community. More _____ and pollutants may be left in the wrong places. Community cleanups can help keep ponds and other natural areas from becoming too polluted. But the easiest solution is to encourage _____ to avoid littering and help keep _____ areas clean and healthy.

Cut out *Currents Question* and submit to the address below

Currents Question

Here is your opportunity to become involved in the Students' Corner of our Web site. For each issue, we will ask you to submit a question that could be used on our Web site. You can check the Students' Corner section of the Kids' Page at WaterMatters.org to find out if your question was used. Here is the assignment for this issue:

Develop a multiple-choice question about a topic included in the growth and development issue of *Currents*. Use the form below and send us a copy. Your question may appear on our Web site!

Question: _____

Answer choices:

- A. _____ B. _____
- C. _____ D. _____

Send to:

Currents Growth and Development Issue
In-School Education
Communications Department
Southwest Florida Water Management District
2379 Broad Street, Brooksville, FL 34604-6899

The correct answer is: _____

Name _____

Address _____

City _____ State _____ ZIP _____

County _____ School _____

Teacher _____ Grade _____

Become a Xeriscape™ Landscaper

Learning about water-conserving ways to landscape for our future is important. One creative landscaping technique that is becoming popular is Xeriscape. Based on sound horticultural practices, Xeriscape can help you create a beautiful, water-conserving landscape near your home or school. Here are a few guidelines to get you started on becoming a successful Xeriscape landscaper:

•Plan and Design Your Area

Think about the high and low spots, wet and dry areas, and sunny and shady areas before you create a design for the area.

•Improve Your Soil

Take a sample of your soil and have it tested at a nursery or your local county extension service.

•Irrigate Smart

Water only what is needed for the types of trees, plant, shrubs and grasses in the area. Many plants can rely on rainfall once they are established.

•Reduce Your Turf Areas

Replace turf areas with shrubs, plants, ground covers, mulch and paths.

•Pick the Right Plants

Select drought-tolerant plants and group them according to similar sunlight and water needs.

•Be a Good Mulcher

Use 2 to 3 inches of mulch to conserve moisture and control weeds.

•Maintain Your Xeriscape

Don't abandon your landscaping efforts. Keep the area trimmed and weed-free and you will enjoy it even more!



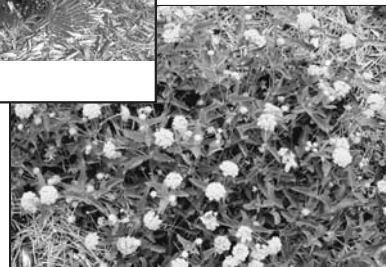
Oak-Leaf Hydrangea



Coontie



Needle Palm



Gold Mound Lantana



String Lily



Answers

Question

page 2

- 1. F
- 2. F
- 3. F
- 4. T
- 5. T



Scramble

page 3

natural, litter, people, development

An increase in population and **development** usually has direct effects on a community. **More litter** and pollutants may be left in the wrong places. Community cleanups can help keep ponds and other natural areas from becoming too polluted. But the easiest solution is to encourage **people** to avoid littering and help keep **natural** areas clean and healthy.

Web Sites

Credits

Sites for CURRENTS Readers to Explore



There are several activities and worksheets on the topic of population available through the U.S. Census Bureau. By participating in this site, you will learn what a census is and how to navigate the U.S. Census Bureau Web site. When you connect to the Bureau's home page, simply click Your Gateway to Census 2000 and then select Census in Schools.

www.census.gov

Also, don't forget to explore the Southwest Florida Water Management District's Web site:

www.WaterMatters.org

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Southwest Florida
Water Management District



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The District does not discriminate upon the basis of any individual's disability status. Anyone requiring reasonable accommodation under the ADA should contact the Communications Department at (352) 796-7211 or 1-800-423-1476 (Florida only), ext. 4757, TDD only 1-800-231-6103 (Florida only).