TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# Environmental Education: Ideas and Resources

A Take Care of Texas Guide for Teachers





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Some of our publications are also available in Spanish. A signature" by Take Care of Texas mascots River and Sky—two Blue Lacys, the state dog of Texas—next to a title indicates a Spanish version in print.

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To place an order, e-mail the title, publication number (e.g. Gl-430, M-038), and quantity desired, along with your name and a physical mailing address (not a P.O. Box), to <educate@tceg.texas.gov>. Quantities may be limited.

Many of our publications are available online in portable document format (PDF). Printed publications may vary in appearance from the online version you download.

nvironmental education is growing at a Jack-and-the-Beanstalk pace. As part of our Take Care of Texas campaign, we offer a wealth of resources for anyone teaching about the environment, including teachers, school administrators, parents, and leaders of youth groups. We have created this guide to make these resources more accessible. Please check out our educational programs, publications, and online materials.

Take Care of Texas publications are free when ordered through <TakeCareOfTexas. org/news-publications/publications>. Quantities may be limited. For a complete listing of TCEQ publications, you can visit our Web page at <www.tceq. texas.gov/publications>.

### Programs

The TCEQ champions several programs designed to engage people—students included—in protecting our environment.



#### **Take Care of Texas**

Take Care of Texas is a statewide campaign that provides helpful information on Texas' successes in environmental protection and encourages all Texans to

- help keep our air and water clean,
- · conserve water and energy,
- reduce waste, and
- save a little money in the process!

For more information about this program, go to <TakeCareOfTexas.org>, e mail <educate@tceq. texas.gov>, or call 512-239-3143.

#### **The Texas Stream Team**

Texas Stream Team is a network of more than 1,400 trained volunteers who collect data on the water quality of our state's lakes, rivers, streams, wetlands, bays, bayous, and estuaries.

The program is administered through a partnership between Texas State University, the TCEQ, and the U.S. Environ-

mental Protection Agency.
About 40 percent of the monitoring groups are composed of teachers and their students.

By showing students how to measure what is happening in the



environment around them, Texas Stream Team helps teachers effectively present many abstract concepts behind biology, chemistry, and ecology.

Teachers can become certified water quality monitors by completing a three-phase training program. Students in grades K-12 and college can monitor a body of water under a qualified teacher's supervision, with activities based on the educational objectives of the class.

A teacher can advance to a certified trainer (see <txstreamteam.rivers.txstate.ecu/moritors/become-trainer.html>, and then train students (in grades 6–12 and college) to become certified monitors. As monitors, students can form their own groups to monitor sites.

To learn more, visit <txstreamteam.rivers. txstate.edu> or call the Texas Stream Team at 877-506-1401.

Galveston Bay Estuary Program

Texans of all ages are urged to discover our natural treasures—among many, the country's seventh largest estuary, Galveston Bay. The Galveston Bay Estuary Program <www.gbep.state.tx.us>, part of the

TCEQ, works to conserve and manage the bay. The program includes the Back the Bay campaign, an environmental education effort that connects citizens of the Galveston Bay area and beyond to opportunities for keeping the estuary healthy. Preservation tips and water-related educational materials are available at <www.backthebay.org>.

Free! Download the Drive & Discover Galveston Bay mobile app through iTunes and Google Play. The guide includes photos, maps, historical and natural site descriptions, and driving directions.



If you work with kids, you know how important a good example can be The Texas Environmental Excellence Awards recognize deserving organizations and individuals across Texas for their

efforts to preserve and protect the environment.

The awards are presented every spring by the TCEQ commissioners and the Office of the Governor. The Youth and Education categories specifically highlight the success of young Texans—and their educators—to prevent pollution, reduce waste, conserve resources, and recycle

Applications are accepted every year between August and October. Learn more about the awards, watch YouTube stories of previo\_s winners, and apply online at <www.teea.org>. For more information, call 512-239-3143 or e-mail <a href="mailto:awards@tceq.texas.gov">awards@tceq.texas.gov</a>>.

# **Publications**

# Take Care of Texas Publications

Take Care of Texas (GI-430)

Leaflet (8.5  $\times$  11 in., 2 pp.) on everyday measures the public can take to help maintain environmental quality in Texas.

**Suggested level:** school administrators teachers, students of all ages, parents

# Take Care of Texas River and Sky Kids' sticker (M-037)

Vinyl sticker (3.5  $\times$  3.5 in.) with the Take Care of Texas message, featuring mascots River and Sky, two Blue Lacy dogs.

**Suggested level:** school administrators, teachers, students of all ages, parents



#### Take Care of Texas sticker (M-017)

Texas-shaped sticker (4 in.  $\times$  4 in.) enhanced with the Take Care of Texas logo.

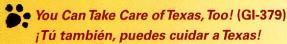
**Suggested level:** school administrators, teachers, students of all ages, parents

# Six Ways to Take Care of Texas bookmark (GI-324)

Seis maneras de cuidar a Texas

A bookmark (2.75 × 8 in., 2-sided bilingual) with tips reminding young Texans to keep our air and water clean and save energy and water.

Suggested level: students of all ages



Poster (16 × 20 in., 2-sided bilingual) features tips for kids on helping to protect the environment from Take Care of Texas mascots River and Sky.

Suggested level: students in grades K-5

### River and Sky's Lone Star Activity Book (GI-380)

Río y Cielo: Un libro texano de actividades (GI-380esp)

Activity and coloring book (8.5  $\times$  11 in., 12 pp.), led by dog mascots River and Sky, teaches kids ways to care for the Texas environment.

Suggested level: students in grades K-5

### Save Water. Save Energy. Save Money at Home (GI-370)

Card  $(4 \times 8 \text{ in.}, 2\text{-sided})$  lists 10 handy tips for conserving and recycling resources, while saving money around the house and during the daily commute.

Display card in your classroom, office, or break room using the Take Care of Texas Brochure Holder (M-042). The brochure holder also doubles as a holder for classroom pencils.

**Suggested level:** school administrators, teachers, middle and high school students, parents, general public

#### What Do I Do With It Now? A Quick Guide to Recycling Resources (GI-288)

Brochure (3.75 × 9 in., 6 panels) devoted to recycling resources in your community.

Suggested level: school administrators, teachers, middle and high school students, parents, general public

#### Texas School Recycling Guide (GI-030)

Booklet (8.5 × 11 in., 16 pp.) provides Texas schools guidance on reducing waste and starting a recycling program.

Suggested level: school administrators, teachers, middle and high school students

#### Take Care of Texas News You Can Use Ex



Monthly e-newsletter offers current information on environmental topics of interest and includes updates to our publications. Sign up today, or download past issues at <takecareoftexas.org/ archive>.

Suggested level: school administrators, teachers, middle and high school students, parents, general public

#### Landscape Materials

#### Take Care of Texas Guide to Yard Care (GI-028)

Leaflet (8.5 × 11 in., 4 pp.) describes how to maintain a healthy yard, save money, and take care of our state's varied landscape.

Suggested level: school administrators. teachers, and groundskeepers, middle and high school students, parents, ceneral public

#### Mulching and Composting: A Take Care of Texas Guide (GI-036)

Leaflet (8.5 × 11 in., 4 pp.) offers quick tips to save money, time and effort, and support your community by mulching and composting.

Suggested level: school admin strators. teachers, and groundskeepers; middle and high school students, parents, general public



# Rainwater Harvesting with Rain Barrels: A Take Care of Texas Guide (GI-383)

\_eaflet ( $8.5 \times 11$  in., 2 pp.) offers a brief how-to guide to collecting rainwater to water your plants and save money.

**Suggested level:** school administrators, teachers, and groundskeepers, students of all ages, parents, general public

#### Managing 10 Common Texas Yard Pests: A Take Care of Texas Guide (GI-405)

Leaflet ( $8.5 \times 11$  in., 4 pp.) teaches environmentally friendly ways to get rid of 10 common Texas vard pests.

**Suggested level:** school administrators, teachers, and groundskeepers, middle and high school students, parents, general public

#### Managing Lawn Problems in Texas: A Take Care of Texas Guide (GI-407)

Leaflet ( $8.5 \times 11$  in., 4 pp.) gives advice on choosing turf, managing your lawn, and solving common lawn problems.

**Suggested level:** school administrators, teachers, and groundskeepers, middle and high school students, parents, general public

#### Landscape Irrigation: A Take Care of Texas Guide (GI-409)

Guide ( $8.5 \times 11$  in., 4 pp.) briefly describes how to develop a water-efficient landscape, use good watering techniques and choose an irrigation system.

**Suggested level:** school administrators, teachers, and groundskeepers, middle and high school students, parents, general public

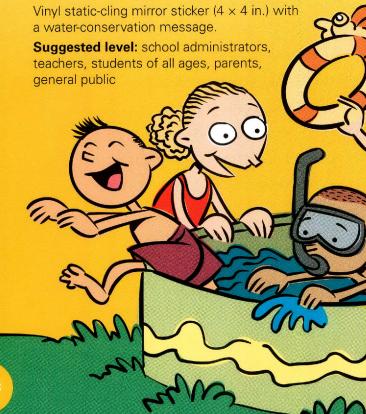
#### **Water Publications**

Conserve Water. Every Drop Counts sticker (M-036)

Bumper sticker (9  $\times$  3 in.) displays a water-conservation message.

**Suggested level:** school administrators, teachers, students of all ages, parents

#### Turn Off the Faucet. Every Drop Counts mirror cling (M-038)



#### Water Recycles: The Complete Story (GI-403)

Color poster ( $18 \times 22$  in., 2-sided) illustrates steps in the water cycle and human activities that can affect water. Back of poster has narrative information on water, as well as activities and puzzles.

Suggested level: teachers, students in grades 3-12

#### Rainwater Harvesting (GI-404)

Guide ( $8.5 \times 11$  in., 36 pp.) covers building simple to complex systems to capture, store, and use rainwater to water landscape plants.

**Suggested level:** school administrators, teachers, and groundskeepers, students of all ages, parents, general public

#### A Guide to Freshwater Ecology (GI-034)

Manual (8  $\times$  12 in., 122 pp.) familiarizes the reader with a variety of important freshwater ecosystems, including water quality and freshwater invertebrates, fish, and plants.

**Suggested level:** teachers, students from grade 7 to college level



#### Water Education Field Guide (GI-026)

Teacher's manual (8.5  $\times$  11 in., 66 pp.) on the basics of water-quality education, with resources, lessons, and reference section.

**Suggested level:** teachers of grades 4–8, but easily adaptable for any grade

#### **Air Publications**

#### Keep Our Air Clean (GI-434)

Brochure that details improvements in Texas' air quality with tips for the public on how to help.

**Suggested level:** teachers, middle and high school students, parents, general public

#### Ozone: The Facts (GI-435)

Answers to general questions about ozone.

#### Suggested level:

teachers, middle and high school students, parents, general public

#### Particulate Matter: The Facts (GI-274)

Answers to general questions about particulate matter.

**Suggested level:** teachers, middle and high school students, parents, general public



#### **General Environmental Publications**

#### What is Toxicology? (GI-426)

Brochure  $(3.75 \times 9 \text{ in., 6 panels})$  covering toxicology and its role in helping the TCEQ measure the effect of adverse chemicals on air, water, and land.

**Suggested level:** teachers, students from grade 7 to college level

#### TCEQ Natural Outlook (PD-020)

Monthly online article discusses a range of environmental issues affecting Texans and their communities. Visit <www.tceq.texas.gov> to read article or download and print a copy. Receive a monthly e-mail alert each time a new article is posted. Sign up online at <www.tceq. texas.gov/goto/outlook>.

**Suggested level:** school administrators, teachers, and groundskeepers, middle and high school students, parents, general public



### Other Media Materials

<TakeCareOfTexas.org> also offers other media materials and programs to helpTexans in their environmental efforts, such as:

• Pledge to Take Care of Texas.

Texans are encouraged to pledge online to conserve water and energy, and keep our air and water clean.

If you take the pledge, you will receive a free Texas State Parks Guide and a free sticker!

(While supplies last.)

• Texas-sized success stories about air and water quality. Did you know that from 2000 to 2011 ozone levels in Texas have decreased by 23 percent?

 Share Your Story. A chance to tell us ways you Take Care of Texas.

Savings Calculator. A tool
to help you estimate how
much household water, energy,
and money you can save by
taking some simple steps to
Take Care of Texas.

Texas Environmental Excellence
 Awards. Video success stories of
 companies, organizations, and individuals
 that have tackled environmental shallenges.

- Pubiic service announcements for radio and television.
- · Kids' page with six interactive games.
- Banner ads and widgets. Say "Take Care
  of Texas" with these animated banner ads
  and static widgets. Simple to add to your
  own website! Visit <TakeCareOfTexas.org/
  news-publications/media-kit>.





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# How grown college

Please fill out our online customer satisfaction survey at <www.tceq.texas.gov/goto/customersurvey>





(revised 4/14)



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