

Watershed Education Tools

Ands-on learning tools that connect what we do on land to what happens in our rivers, our lakes, our oceans and even our groundwater.



### • • • • • • • • •

EnviroScape® makes complex issues much clearer and helps people see how to prevent water pollution in their own communities.

EnviroScape® makes the connection whether you are 5 or 85!

EnviroScape® units available:

- Watershed/Nonpoint Source
- Coastal
- Drinking Water & Wastewater
- Waste Management (Landfill & Recycling)
- Wetlands
- Hazardous Materials and Waste
- Riparian Kit Groundwater Kit

www.enviroscapes.com for tips, full color pictures, newsletter, and more!

# EnviroScape<sup>®</sup> Watershed/Nonpoint Source

### $\chi$ $\gamma$ e all live in a watershed, with water pollution coming from many sources.

EnviroScape® Watershed/ Nonpoint Source shows pollution from nonpoint sources, such as

- Residential areas
- Forestry
- Transportation
- Recreation
- Agriculture
- Construction
- Storm drains

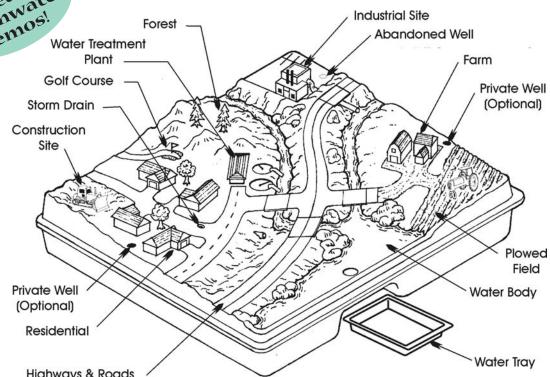
And point sources such as

• Industry

Pollution and runoff are visually apparent when rain carries soil (cocoa), chemicals (colored drink mixes) and oil (cocoa and water mixture) through the watershed to a pond, lake, river or ocean.

It also shows prevention — best management practices include felt buffer strips as vegetation, clay to create berms and other methods to show conservation and water pollution prevention measures at work.

**ITEM #** EnviroScape® Product 71005C EnviroScape® Nonpoint Source



**Highways & Roads** 

Abandoned and private wells are for use with Groundwater Kit (optional)

**CONTENTS:** Watershed/Nonpoint Source topographical map (top), clear base, houses, barn, factory, storm drain pipe, treatment plant, trees, golf flags, cows, cars and best management practices such as buffer strips, clay berms, manure container, soil, oils and chemicals (cocoa, drink mixes and oil mix), bridges, watercatcher, rainmaker, water plug and User's Guide.

**DIMENSIONS:** approximately 25" x 30" x 5"



Patent No. 5,427,530 info@enviroscapes.com

JT&A, inc. ♦ (703) 631-8810 www.enviroscapes.com

# EnviroScape® Wetlands

InviroScape® Wetlands demonstrates the basic functions and values of inland and coastal wetlands.

Learn how to recognize different types of wetlands, understand what activities negatively affect wetlands and what activities can help to conserve wetlands.

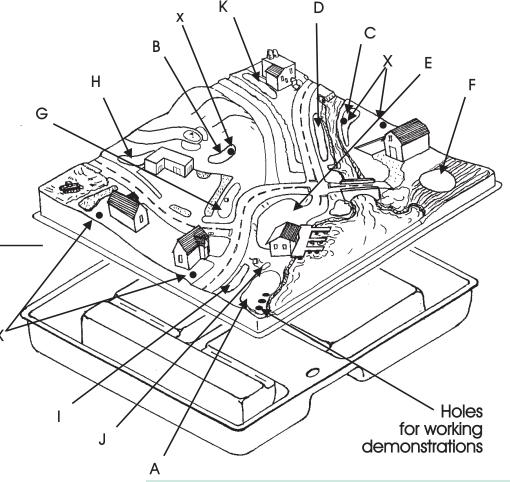
See how constructed wetlands can help us better manage what we do on the land.

- A shoreline marsh
- **B** forested wetland
- C riverine wetland by forest
- D riverine wetland by farm
- E marina site wetland
- F field with drainage /wetland
- G constructed wetland below mall
- H constructed wetland above mall
- I constructed wetland below residences
- J constructed wetland by storm pipe

ITEM #EnviroScape®Product71005CWEnviroScape®Wetlands

JT&A, inc. ♦ (703) 631-8810 www.enviroscapes.com





**CONTENTS:** Wetlands topographical map (top), clear base, shopping center, parking lot, marina and boat slips, rainmaker (spray bottle), assorted wetlands (sponges and felt strips), plant roots (cotton swabs), measuring cup, User's Guide, houses and other buildings, bridges, watercatcher, trees, golf flags, cocoa, oil, drink mixes, cows, vehicles, and storm drain pipe.

DIMENSIONS: approximately 25" x 30" x 5"



## EnviroScape® Coastal

InviroScape® Coastal demonstrates point and nonpoint sources of pollution and the effects of both on our coastal areas.

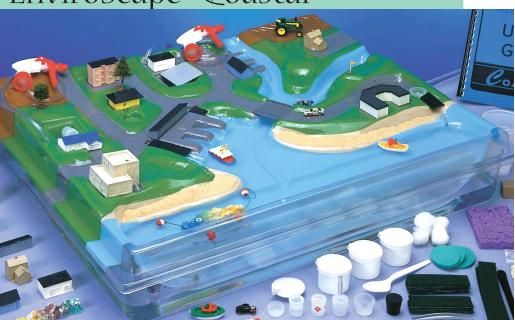
The front of the model remains clear for a view of the ocean. EnviroScape® Coastal demonstrates sources of water pollution — and its prevention — such as . . .

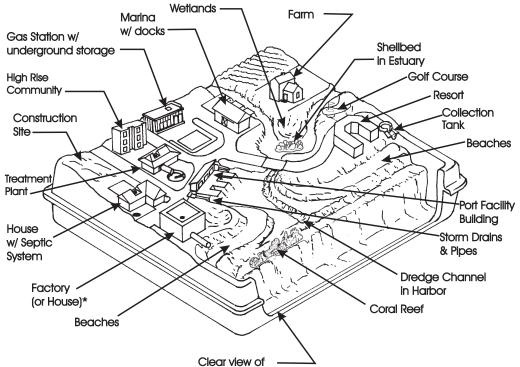
- Nonpoint sources from many different areas in a community
- Marine debris
- Oil spills
- Industrial & treatment plants
- Underground storage tanks
- Septic systems

It demonstrates point sources *and* nonpoint sources of pollution — and the effects on wetlands, estuaries, the ocean, beaches, barrier islands, groundwater, and even coral reefs and shellfish beds.

ITEM #EnviroScape® Product71005CWEnviroScape® Coastal

JT&A, inc. ♦ (703) 631-8810 www.enviroscapes.com





Ocean

**CONTENTS:** Coastal topographical map (top), clear base, resort building, high-rise/urban building, house, marina, gas station, treatment facility, farm house, port facility, coral reef, shellfish bed, bridge, septic tank, manure containment structure, collection site at resort, underground storage tanks, wetlands and grass strips, sand, marine debris, tractor, car, trees, buoys, boats, golf flag, wells w/pumps, oils and chemicals (cocoa, drink mixes and oil mix), water plug, and User's Guide.

DIMENSIONS: approximately 25" x 30" x 5"



## EnviroScape® Waste Management (Landfill & Recycling)

#### Where Does the Waste Go In Your Community?

AnviroScape® Waste Management demonstrates and addresses this question and more. Learn about

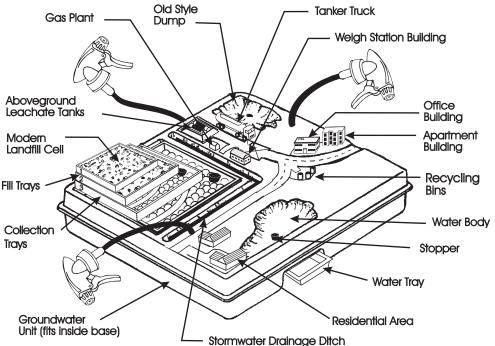
- A functioning modern landfill operation, including leachate collection and management
- Recycling activities, including labeled recycling bins
- Composting, including a mini-composting extension activity
- Illegal dumping and Litter Prevention
- Groundwater monitoring and protection
- Unlined landfills ("dumps") of Trays the past
- How landfills and communities work together to protect our drinking water and our recreational waterbodies

Even includes a scrumptious "Luscious Layered Landfill" activity! Also included are suggested related activities on how to get more information on landfills in your community, lesson plan outline, and a quiz.

ITEM #	EnviroScape <sup>®</sup> Product
71005CL	EnviroScape® Waste Management
	with groundwater liner

JT&A, inc. (703) 631-8810 www.enviroscapes.com





**CONTENTS:** Waste Management topographical map (top), clear base, groundwater liner insert, trays that represent main and back-up liners and collection systems, trays that represent layers or lifts of trash, pumps and tubes to illustrate leachate collection systems, sponge pieces to represent trash, impermeable and permeable caps, tanker truck, leachate storage tank cover, trees, watercatcher, apartment and office buildings, weigh station, gas plant, houses, recycling bins with labels, spray bottles (rainmakers), felt strips (for storm drainage ditches), rubber gloves, sponge, sample liner material and User's Guide. **DIMENSIONS:** approximately 25" x 30" x 5"



# EnviroScape® Hazardous

hat happens when hazardous materials are improperly discharged, disposed or accidentally spilled on land?

EnviroScape® Hazardous provides demonstrations and activities on potential sources of pollution, proper use and disposal, clean-up, restoration, and prevention of pollution from hazardous materials and waste. Also addresses environmental and health risks associated with contamination. Some areas addressed on the model include...

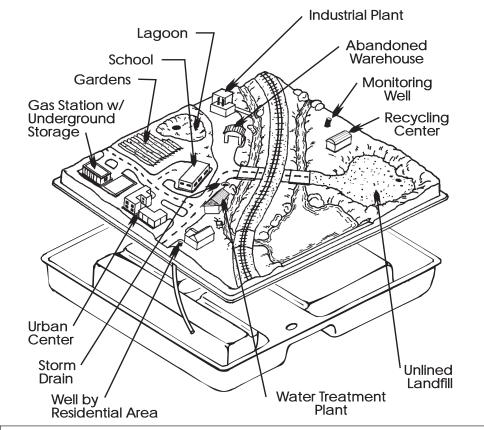
- At home
- Underground storage tanks
- Commercial facilities
- Transportation accidents
- Older, unlined landfills
- Abandoned sites and
- Groundwater contamination and clean-up

Filled with activities, it even let's you restore an abandoned site to a soccer field!

ITEM #EnviroScape® Product71005CHEnviroScape® Hazardous Materials

JT&A, inc. ♦ (703) 631-8810 www.enviroscapes.com





Includes activities to show proper use, collection and disposal of hazardous materials.

**CONTENTS:** Hazardous materials topographical map (top), clear base, schoolhouse, gas station, warehouse, recycling building, apartment building, office, building, concrete cement slab, landfill cap, gas piping, lagoon liner, assorted buffer strips, barrels, baseball diamond, train and semitrailer truck, wells, storage tanks, trash, monitoring pipe, flashlight, houses, factory, treatment plant, bridges, watercatcher, trees, cocoa, oil,drink mixes and User's Guide.

DIMENSIONS: approximately 25" x 30" x 5"



# IT'S ARRIVED! EnviroScape®'s Drinking Water & Wastewater Treatment Model

• JT&A, inc., Patent No. 8,043,094 and 5,427,530 •



#### Includes three demonstrations that can be done individually or together as a unit —

- Drinking Water Sources and Treatment shows where drinking water (residential and commercial, rural and urban) comes from and how it is delivered to us;
- *Wastewater Treatment* shows what happens to water and waste after we use it (how sewage/wastewater is treated)
- What *biosolids* are and how they are being used or disposed.

Consists of a colored landscape map that sits on a clear base with color-coded channels, or "pipes", that run under removable road sections.

#### Follow the path of water we use in our communities ...

- from the river to the water treatment plant
- from the treatment plant to the water tower or reservoir
- from the water tower to the houses and city buildings
- from use in the houses and city to the wastewater treatment plant
- and from wastewater treatment back into the river

#### Also includes:

- Working septic system and rural water sources
- Stormwater discharged directly to a waterbody OR sent on to the wastewater treatment plant; and demonstration of a combined sewer overflow
- Groundwater & much more!

### www.enviroscapes.com

or contact Erin Foster at (703) 631-8810 ext. 12, learn@enviroscapes.com

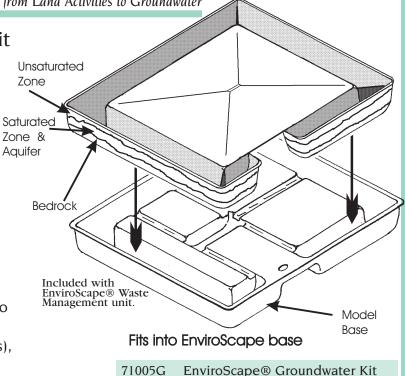
## EnviroScape<sup>®</sup> Groundwater Kit

Helps Make the Connection from Land Activities to Groundwater

he EnviroScape® Groundwater Kit demonstrates how groundwater works, how we use groundwater, how we pollute groundwater and how we can prevent and clean up groundwater contamination.

It covers the basic concepts and is not intended for use as a highly technical demonstration.

The kit includes a plastic liner with a silkscreened depiction of unsaturated/saturated soils, aquifer and bedrock layers that inserts into the EnviroScape® clear base — plus private wells and pumps (clear tubing and spray pumps), an abandoned well, marker for new measuring activities, and User's Guide.

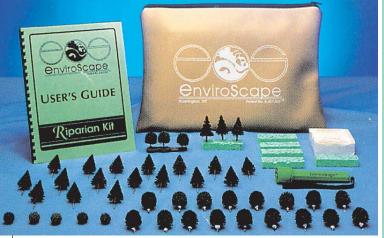


## EnviroScape<sup>®</sup> Riparian Kit

he EnviroScape Riparian Kit shows the benefits of riparian buffers — areas including trees and other vegetation adjacent to the banks of streams, rivers and lakes.

The kit explores the positive effects of good riparian buffers as well as activities that contribute to poor riparian buffer zones. Positive effects include cooler water temperatures and shading for in-stream organisms (canopy cover); reduced volume and rate of flooding (water infiltration); food sources for in-stream organisms (protective habitat); streambank stabilization (erosion control); sediment trapping and nutrient removal (plant root systems); and recreational corridors.

Kit contains components for a complete demonstration of how riparian buffers affect water quality,



quantity and flow. Each kit contains 40 trees (20 round and 20 tall), shrubs, clay, assorted roots (cotton swabs), flashlight and User's Guide. Designed for the EnviroScape Wetland model, but may be used with all scenarios with some modification to the demonstration.

71005RIP EnviroScape®Riparian Kit

JT&A, inc. ♦ (703) 631-8810 www.enviroscapes.com

