

# StreamTalk

The newsletter for stewards of salmonids and their habitat • Volume 14 • Number 2 • Fall 2007

## Gold medals for green activists

We are delighted to announce that BC and Yukon boasted three winners of this year's Canadian Environment Gold Medal Awards, sponsored by *Canadian Geographic* in partnership with the Government of Canada.

Jim Taylor of Mission, The Canadian Parks and Wilderness Society (CPAWS) Yukon Chapter, and the Nile Creek Enhancement Society of Vancouver Island received these prestigious awards at a ceremony in June.

**E-team founder Jim Taylor** was given a BC Community Achievement Award at Victoria's Government House in April. A few weeks later he was off to Montreal to receive the gold medal in recognition of his work in environmental education. This won't surprise people who know Jim as the creator of the e-team, which inspired and coached troubled youth in Mission by connecting them to nature.

Of course, the e-team is not his only contribution to environmental action. He has introduced the Salmonid Enhancement Program to students of all ages for years, and his leadership and vision were vital elements in the successful drive to purchase and protect the Silverdale Creek Estuary Wetlands.

Jim launched his first salmon enhancement project many years ago with a grade seven science class. He recognized that the outdoors made an unbeatable classroom. When he began to work with at-risk youth in the 1990s, he knew that field work was just the right tool to use. "It was a natural for the kids who were not making it in conventional schools," says Jim. "Sometimes you just have to create a new frame of reference to tap into a student's potential."

This approach evolved into a full time e-team program, which drew students aged 12 to 17 from all over the district. The e-team took on everything from salmon enhancement in Silverdale Creek to attacking the invasive bass problem in Stave Lake.

"Most of these kids arrive with three inch thick files outlining their transgressions," says Jim. "They come here hating school and they are convinced that will never change." Jim and his colleague Roseanne de Montbrun created an engaging balance of academic and outdoor work that opened students' eyes to the joy of learning and to their own natural abilities.

This year, he has a new position involving student job placement, which may still allow him to use fieldwork as a means of reaching young people.

"In the field, the students feel an immediate sense of accomplishment," says Taylor. "And that's something they are not used to." To Jim, watching these kids succeed is as exciting as watching the first returning coho jump. "You know you've done your job."

### **CPAWS Yukon: Harnessing creativity to promote river conservation**

Around a campfire one night, CPAWS organizers hatched a plan to invite 17 painters, sculptors, photographers,



*Jim Taylor at work with the e-team.*

journalists and writers to take guided journeys along the Snake, Wind and Bonnet Plume rivers. These are part of the Peel River watershed, a magnificent mountainous wilderness that is home to First Nations people and a wealth of boreal mammals and birds. The vast region, little known south of the Yukon border, is perpetually on the radar of mining and energy companies.

The result was the stunning exhibit *Three Rivers: Wild Waters, Sacred Places*, which opened to critical acclaim in

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Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Canada

*Gold. . .continued from page 1*

October 2004 in Whitehorse and is now touring galleries across North America. It has generated hundreds of letters in support of CPAWS Yukon's conservation campaign.

**Nile Creek volunteers:  
careful planning plus sheer  
muscle**

When stewardship volunteers are knee-deep in mud, wrestling with invasive ivy or hauling rocks, they aren't thinking about winning a gold medal. However, members of

the Nile Creek Enhancement Society (NCES) are justly proud of their award for environmental restoration and rehabilitation.

Members volunteer their time to enhance creeks on eastern Vancouver Island, restoring ecosystems with the goal of bringing back the salmon that were once abundant there. They run a creekside hatchery from which they release a million pink fry each year, and have built a spawning channel parallel to the main stream.

Director Diane Sampson says, "For me, attending the awards event had additional meaning. Speaking with the finalists in the various categories gave me hope for our future. I realized that what these people and groups have accomplished is just a small representation of all the others throughout Canada and the world who are also volunteering for the environment."

The Nile Creek group carries on with maintenance and protection of Nile Creek and is beginning work on other creeks, starting with groynes at the estuaries to prevent winter storms from blocking the way for salmon.

They are in their second year of planting bull kelp to reestablish beds that existed in the area in the 1950s. Kelp is an important habitat for adult salmon, in that it protects them from predators.

NCES sees its greatest challenge as the fight against community apathy. "Changing this will come from educating our children, instilling in them a sense of responsibility for the protection of the environment that will be left in their hands," says Diane. "We are producing a film to help us make the point!"

Congratulations to NCES, CPAWS Yukon and Jim Taylor – green gold medallists.

*- with contributions from Diane Sampson and Maurice Coulter-Boisvert*



*Hard-working members of the Nile Creek Enhancement Society display their just reward.*

## ***A promising kelp experiment: The Nile Creek Enhancement Society in action***

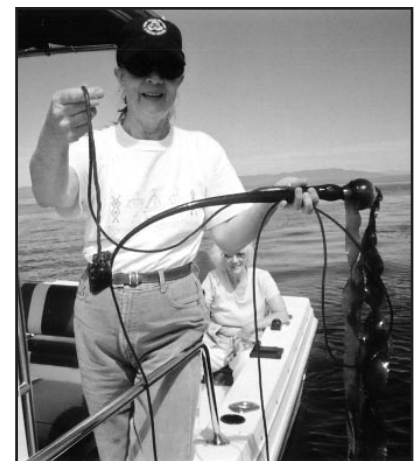
*By Dave Davies*

Nile Creek Enhancement Society has been experimenting with a low-tech method of restoring kelp forests in near-shore marine environments off Vancouver Island. The volunteers have been working with Dr. Louis Druehl of the Bamfield Marine Sciences Centre, who is a leading expert on kelp. They collected kelp spores from existing beds and tried two different methods of transplanting them to areas where there were once extensive kelp beds. One method involved filling weighted burlap sacks with kelp spores and dumping them off a boat. The other was to weave the

spores into weighted rope strands and lay them on the sea bottom, also from a boat.

A diver recently examined the sites and found that kelp transplanted last fall are now up to 20 feet tall and very healthy looking. This success is preliminary, as it is not yet known how well these beds will sustain themselves, but it shows a lot of promise.

There are a few theories about the demise of kelp beds in the Strait of Georgia, including overharvesting in the 1970s and 1980s and changes to salinity and temperature of the water.



*Diane Sampson with healthy bull kelp.*

If other groups would like information about this experiment, please contact Ken Kirkby at 250-757-8597 or Diane Sampson at 250-757-8775.





## Community Involvement Workshop 2007

# Bluegrass and grasslands

Williams Lake put on a great show for this year's Community Involvement Workshop.

We southern Streamkeepers boarded a very comfortable bus at points between Horseshoe Bay and Coquitlam, ready for the six hour trip. Everyone settled down quietly until we stopped for a break at Cache Creek. Then we woke up, and the fun and music started!

Our hosts were Baker Creek Enhancement Society, Cariboo Chilcotin Conservation Society, DFO, Scout Island Nature Centre and Thompson Rivers University. All the activities were conducted out of the university campus.

Susan Rowntree and I represented West Vancouver Streamkeepers. There was a hallway between the main entrance hall and the dining area where all the displays were located and we had a prime location near the front.

The workshop sessions, many of which were out in the field, covered a wide variety of topics including the creation and use of watershed models, fish habitat assessment techniques, riparian ecology and

restoration, and the effects of salmon angling.

The banquet started at 6:30 pm with a no-host bar followed by a delicious dinner that never ended! As always there was a raffle of some very special items including a beautiful silver bracelet, and a silent auction. Susan picked up some interesting items, but I failed to get anything. Dancing to a Horsefly band with quite a few bluegrass selections provided fun till 11:30 pm,

with only one or two people leaving earlier. A great evening.

Sunday excursions included the intriguing "Ants on Plants in the Grasslands", and guided walks for bird and plant enthusiasts.

There was a lot of sleeping on the way back!

These workshops are a lot of fun, but perhaps the most rewarding

### Has global warming brought invasive species to the Fraser River?



*Anatis flavus latexi's usual habitat is in small, warm, sloshy pools with bubbles.*

*Dave Clough's highly scientific water flow demonstration involved river currents and rubber duckies. This resulted in the surprise capture of an alien species by the group working with an inclined plane trap downstream.*

features are the interesting people and the great contacts made with other volunteers, fisheries staff and organizations.

We understand that the May 2009 workshop will be held in Maple Ridge and hosted by Kanaka Creek Streamkeepers. See you there.

– Hugh Hamilton



*Chris Dorais of the NSCU Board of Trustees, John Lewis from North Vancouver School District, Chris Catliff of NSCU and Sue Adams, NSCU Foundation, with one REALLY big cheque.*

## Million dollar prizewinner

Many of our readers are familiar with the North Vancouver Outdoor School, venue for the 2005 Community Involvement Workshop. You'll be pleased to hear that the North Shore Credit Union (NSCU) Foundation has awarded its \$1 million Legacy Fund to the Outdoor School.

The money will be used to build a learning centre north of Squamish, which will provide outdoor environmental and cultural education to more than 10,000 children, students, teachers and adults each year. It will be operated by the North Vancouver School District and will offer workshops, seminars and open-air learning experiences focussing on environmental stewardship, cultural history, science, arts, community building and personal growth. It is expected to be complete by late 2009.





# The power of planning

Creating an annual calendar for your group can be a powerful tool for organizing, advertising, recruiting and even funding. It keeps all your members in

the loop. It improves the quality of monitoring and counting activities, as it helps to ensure they occur at consistent times and locations each year. Last and not least, it can be used to schedule in the rest of your own life activities!

And these days you can easily place it online so that key dates can be shared with members, other groups, new recruits, and the media.

## Where to begin?

You can start with a paper calendar, or jump right in and sign up to a virtual calendar site such as <http://www.google.com/calendar/render>. (Other calendar sites are compared at <http://www.techsoup.org/learningcenter/webbuilding>, "Three free, easy ways to add a calendar to your website.")

Mark off the fisheries window for your area (August 15 to September 15 in the Lower Mainland) for in-stream work. Highlight the bird

nesting season, April to August, to ensure that groundcover removal doesn't accidentally get scheduled at this time. Finally, host a planning meeting to schedule any other events that your group has in mind. Fill in:

- your annual creek clean-up, invertebrate and water quality sampling
- annual fry and smolt trapping and identification, and spawner surveys
- meeting dates
- community events in which your group regularly participates

Plot in dates to ask for letters of support, necessary permits, and so on, and flag the deadlines for applications with granting agencies.

## Sharing your schedule

Online calendars allow you to share your schedule with selected groups and individuals. You can give editing access to designated people so they can add to it and make changes. You may want to limit the number who have access, but be sure to share the task of keeping the calendar up to date. Use the notification feature to have Google email subscribers to remind them of upcoming events.

[View an example at  
birdsonthebay.ca/  
calendar\\_of\\_events.htm](http://birdsonthebay.ca/calendar_of_events.htm)

Whenever a person or a group such as Girl Guides calls to volunteer, you can send them the schedule so they can plan to join in your activities.

The calendar shows at a glance that your group is doing watershed planning, community outreach, behaviour changing initiatives, monitoring and habitat restoration. When people call to suggest that your group should be acting on a particular pollution or development threat, your calendar shows that, while this year's agenda prevents you from immediately addressing a new issue, the caller is welcome to attend a planned event or meeting to share his or her concerns and get it on the agenda in the future.

Everyone can see that your group is organized, has community and funding support, and legal permission for your projects.

Shared calendars help everyone see that they are or can be part of a large group of dedicated people, who succeed together with challenges that might discourage the individual.

– ZoAnn Morten

## Discover the Valley of the Eagles!

### Fraser Valley Bald Eagle Festival

Saturday & Sunday, November 17 & 18

Bigger and better than ever before

See hundreds of eagles in their native habitat!

12 festival sites from Mission to the Harrison River

Speakers Wonderful food  
Jetboat tours Displays Crafts Children's events

[fraservalleybaldeaglefestival.ca](http://fraservalleybaldeaglefestival.ca)



Photo: Lou Scullion





# Taking storm drain awareness to decision-makers

By Joanne Day

Not long ago, ZoAnn Morten of the Pacific Streamkeepers Federation noticed toxic cement runoff flowing into a storm drain at her feet. When she reminded a nearby worker that construction firms are supposed to protect the drains in construction zones, he shrugged and said, "Call the City – it's their responsibility."

Actually, the responsibility is shared. Municipalities need to introduce and enforce requirements, and construction firms should take precautions to prevent worksite debris from flowing into storm drains and into waterways where fish and insect habitat is affected. With so much construction taking place all over the province, this has become an urgent issue.

So when the Union of BC Municipalities (UBCM) held an Environment Conference this June, ZoAnn and I realized it was the perfect opportunity to spread the word about storm drains to local decision-makers throughout the province, and we prepared a presentation to raise their awareness. We added that local government can also help by supporting public campaigns to spread the word that storm drains are not to be used for disposal of used oil, cigarette butts, candy wrappers, or leftover paint.

The Environment Conference included sessions on such diverse topics as exploring municipal alternate energies, inspiring communities for the future, fostering

stewardship and creating tools for change. It was encouraging to see so many community representatives sharing ideas about thinking globally and acting locally.



**Community groups can download storm drain information, a slide show and a video from Pacific Streamkeepers at:**

**<http://www.pskf.ca/resources/stormdrain/frameset.html>**

## WANTED:

### ***Soon-to-be retired or newly-retired salmon biologist***

The Sorrento Retreat and Conference Centre on Shuswap Lake is about 5 km away from the Adams River spawning grounds. I have given three-to-five-day salmon workshops there to interested people (including US ElderHostel groups) for the past 10 years, but am reaching an age when I need to withdraw. The next dominant sockeye run to the Adams River, when we can expect an impressive million or more sockeye in a short accessible section of the river, will be in 2010. The centre is seeking a biologist who will take over from me by that time. All my resource materials (including historical movies and 35 mm slides) will be in the centre library.

Workshop participants in the past have often been very astute retired professionals, keen to see what they have long heard about the run through the media, and to receive a professional level introduction to salmon migratory and spawning behaviour and the story of the Adams River run.

Please contact me at [dvellis@uvic.ca](mailto:dvellis@uvic.ca).

– Derek Ellis, R.P.Bio.



*Photo courtesy of Adams River Salmon Society*

### ***Your valuable stream data***

The BC Ministry of Environment, Fisheries and Oceans Canada, the University of British Columbia and ESSA Technologies are developing a screening model for identifying temperature sensitive streams (TSS) that integrates data on stream and watershed characteristics, as well as climatic conditions.

TSS would likely include streams that either currently have temperatures high enough to cause adverse effects on in-stream or down-stream fish populations, or could have such temperatures if forest harvesting

altered riparian zones and related stream shading influences. Designation of a stream as temperature sensitive would mean that special riparian best management practices would be required to leave sufficient shading to maintain stream temperatures. Currently, there are no scientifically defensible methods to identify and designate these streams.

The project team is looking for complete records of temperature data over the summer (e.g., raw hourly data or data summarized by daily maximum, minimum, and mean). Temperature data from the winter would also be helpful, though we recognize these data may be limited.

Please contact Marc Nelitz at [mnelitz@essa.com](mailto:mnelitz@essa.com) if your group has data to contribute.



# Rain garden pioneers

Kids at Cougar Canyon Elementary School are doing their part to help save the planet.

In partnership with Cougar Canyon Streamkeepers, the Pacific Salmon Foundation, the Delta School District and Delta municipality, the students have planted the region's first rain garden.

## Your group could build a rain garden

The Nature Trust of British Columbia has established an endowment fund to support community rain garden projects. Selected Streamkeeper groups in Greater Vancouver will be invited to apply for grants. The applicant group is encouraged to enlist the help of another volunteer community group such as a local church, public school parent advisory council, neighbourhood association or co-op housing residents' council. Community awareness, as well as cleaner water, is part of the plan. The program will be expanded to other areas in future.

Find out more at [www.naturetrust.bc.ca/scol\\_grants.php](http://www.naturetrust.bc.ca/scol_grants.php).

"It's a very special project and we hope other organizations take notice of it and we see it replicated elsewhere," principal Dennis Ducklow said at the garden's official unveiling in April.

Deborah Jones, project coordinator with Streamkeepers, spearheaded the project. Jones said the rain garden takes the drainage from the school's paved parking lot, which is contaminated with "yucky hydrocarbons and tailpipe toxins," and filters it naturally before the water enters a nearby salmon-bearing stream.

"We're trying to imitate nature," Jones said.

"We're trying to mimic the forest that used to be here."

Historically, wild coho salmon have been known to spawn in Cougar Creek.

Staff with Delta's engineering department closed off two existing storm drains and installed an emergency drain at the end of the parking lot to prevent flooding. They excavated a sunken garden the full length of the parking lot and laid down drainage rocks, soil and boulders, and planted a dozen larger trees.

The Pacific Salmon Foundation provided \$12,300 for the garden and the collection of plants, which include small shrubs, heather, native ferns and lupines.

To prepare for the planting, all of the school's students had a 40-minute lesson about the importance of rain gardens.

"Every one of our 480 kids was involved in planting," Ducklow said.



Deborah Jones with members of the rain garden team.  
Photo: Surrey Leader

Jasmine Mann, 11, said she's proud to have been a part of the project.

"I wish every school had the opportunity to do it," she said.

In creating the garden, Jones hopes the students have learned that one person can make a difference.

"We tend to look at these environmental problems and say, oh my gosh, it's so vast, what can I do? There are always small things each and every one of us can do, and if everybody does it, that's working towards a solution," she said.

Jasmine said planting the garden has made her more sensitive about the earth's fragility.

"I did respect the environment," she said, "but not as much as I do now."

— Surrey Leader.

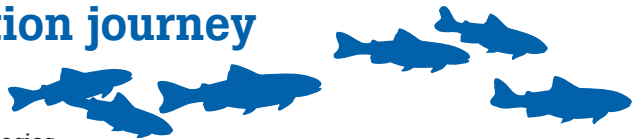
## First step in a restoration journey

In 1929, construction of the Wilsey Dam blocked access to 30 km of upstream habitat for anadromous salmon and resident trout species.

This year, 74,000 chinook fry have been released into the Shuswap River, upstream of the dam.

The Okanagan Nation Alliance (ONA) Fisheries Department was established in 1995 to take the lead in salmon restoration within Okanagan Territory. The project is supported by the Okanagan Nation Alliance, the Okanagan Indian Band, Fisheries and Oceans Canada, the BC Ministry of Environment, the Village of Lumby, and Whitevalley Community Resource Centre.

This release is the first step in meeting their long-term goals. These are to fully restore salmon and trout populations within the territory, to return chinook, interior Fraser coho and sockeye to their former habitat and migration range in the Thompson basin, and to revitalize the Okanagan Nation salmon fishery.





## Friends of Semiahmoo Bay Society *It's busy at the border*

Boundary Bay is truly a special place of rivers, estuaries, salt marshes, sand and gravel beaches, mudflats and expansive eelgrass meadows. This ecosystem is vital to millions of migratory shorebirds travelling the Pacific Flyway, raptors, fish, shellfish, and more.

Friends of Semiahmoo Bay Society (FoSBS) is a transboundary stewardship group focused on Boundary Bay and its place in the greater context of the Fraser estuary, Georgia Strait and Puget Sound.

With support from the Vancouver Foundation, Vancity Envirofund and Fisheries and Oceans Canada, FoSBS has developed an impressive list of marine conservation initiatives.

### Watch that eelgrass!

The eelgrass zone in Boundary Bay is crucial to the local food web and is also an important herring spawning ground. Volunteers map and monitor local eelgrass beds and record them on the Community Mapping Network. This spring volunteers led by marine biologist Ramona de Graaf completed work on three test transplant sites at Blackie Spit, which they'll be watching closely.

### Forage fish spawning habitat

The group has launched a pilot project to survey and classify spawning habitat suitability. Boundary Bay was once known for abundant herring, surf smelt, sand lance and anchovy stocks. Several areas show high potential for restoration.

### A specialized atlas

This project started in 2002 as the Boundary Bay Habitat Atlas. In 2005, it was expanded to include

the greater watershed ecosystem across jurisdictional borders, and the Georgia Basin Habitat Atlas was conceived. It can be viewed online at the Community Mapping Network, [www.georgiabasin.net](http://www.georgiabasin.net). You can also order the printed atlas, which has over 100 colour photographs, maps and descriptions. Visit [www.birdsonthebay.ca/atlas.htm](http://www.birdsonthebay.ca/atlas.htm).

### Hosting World Ocean Day

Partnering with the City of Surrey Parks Department and 52 environmental organizations, FoSBS was proud to host World Ocean Day 2007. Over 3,000 participants attended. Plan to join in next year's celebration on June 1, 2008, at Blackie Spit in Surrey.

### Beach Heroes

Thanks to support from DFO and the Ministry of the Environment, a Beach Hero interpreter led family-oriented walks all summer at Crescent and White Rock beaches.

The interpreter also surveyed recreational beach users and handed out multilingual crabbing and fishing regulations, shellfish harvesting and observe-and-report brochures. Thanks to Sandie Hollick-Kenyon and Bridget Ennevor, there were Beach Hero pins, stickers, tattoos, bookmarks and crab callipers to distribute.

### Shorekeeper surveys

Shorekeeper teams are in their fourth year of surveying sections of beach around the whole bay. Informally, Shorekeeper methods

are taught to two school classes and the students carry out a survey over their school year. FoSBS hosts free training workshops each year in mid-May with DFO's Sean MacConnachie. If anyone has a favourite area of Boundary Bay or Tsawwassen beach they would like to monitor over time, contact us. It's a lot of fun!

### Great Canadian Shoreline Cleanup

This September, FoSBS removed subtidal debris under the pier in White Rock. Ocean Pro Divers had the boat support of the First Semiahmoo Sea Scouts. Volunteers did a shoreline cleanup. Staff from



*Forage fish are an essential link in the food chain. Volunteers are looking for potential spawning grounds to restore or enhance. Photo: R. de Graaf.*

Vancouver Aquarium and City of White Rock Parks lent a hand and help with equipment. The Elks Club prepared a barbecue to shore up the labourers. The tally: 145 plastic bags, 496 food wrappers, 8 shotgun shells, 1,114 cigarette filters, 12 crab traps, and much more.

As you can see, Friends of Semiahmoo Bay Society initiatives are many and varied. We welcome your interest and involvement. Explore our website at [www.birdsonthebay.ca](http://www.birdsonthebay.ca).

— Margaret Cuthbert



## Reader's Corner

### ***Last Child in the Woods – Saving Our Children from Nature-Deficit Disorder***

By Richard Louv. Algonquin Books.

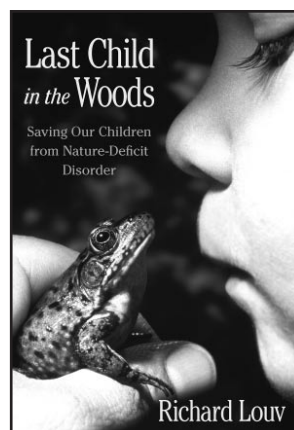
"Dad, how come it was more fun when you were a kid?" Author Richard Louv's stories of the outdoor playtime he enjoyed as a child – building tree houses, playing in the swamp, fishing – left his son feeling that he has missed out on something important.

When Louv interviews the adults of his generation, he taps into vivid memories of time spent playing in fields, forests, and streams. I found that these sparked profound recollections of my own childhood nature experiences. Conversely, Louv discovers that there is an increasing divide between today's children and the natural world. As one fourth grader explains to him, "I like to play indoors because that is where the electrical outlets are."

Louv refers to several studies that link children's contact with nature to their physical and emotional

health. And it is direct contact with the world outside that Louv is pushing for, a chance for children to "get their feet wet and their hands dirty." Today's children know more about the destruction of the Amazon rainforest than they do about at-risk animals and plants in their own neighbourhood. Through personal experience of the natural world, Louv believes that children will increase their knowledge of and passion for the environment. Today's children are tomorrow's environmental stewards. His arguments are compelling, and if you have children in your life, I guarantee you will want to take them hiking, fishing, and camping after reading this book.

– Cathy McClean



## Salmon Site-ings

<http://map.ns.ec.gc.ca/kyw/>

This Environment Canada website is called *Know Your Watershed*. You can fill in your location and access online maps, information and links specific to your area. You'll also find plenty of useful general information about Canada's freshwater resources.

<http://sanctuaries.noaa.gov/education>

The National Marine Sanctuary Program in the United States and the National Geographic Society have launched a series of K-12 marine education lesson plans. *Oceans for Life* highlights cutting-edge research, maritime heritage, cultural resources and environmental issues in American marine sanctuaries. Of particular interest to BC educators is the Olympic Coast National Marine Sanctuary, located just south of the border on the Olympic Peninsula, with species and issues common to both nations.

[www.populationeducation.org/index.php](http://www.populationeducation.org/index.php)

Population Connection is updating its secondary school curriculum package, *Earth Matters: Studies for Our Global Future*, and offers the second edition free for downloading. Units include *Population Dynamics*, *Climate Change*, *Water Resources*, and more.

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*Please contact Joanne Day at  
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line "StreamTalk by e-mail."*

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