



July 2011

Nez Perce Soil & Water Conservation District
www.nezperceswcd.org

Forever Soil & Water

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Unless otherwise noted, all articles are written by Whitney Garrison, and all photos courtesy of Nez Perce Soil and Water Conservation District.



Cover photo courtesy Brenda Boyer

Environmental Awareness Days 2011: A HUGE SUCCESS!

By Whitney Garrison

Busloads of excited local 5th and 6th graders filled Lewiston's Round-Up Grounds on May 17 and 18, eager to take part in the fun activities planned in this year's Environmental Awareness Days. The District hosted the 24th annual event for more than 500 students in Lewiston, Clarkston and Lapwai schools. Each day kids learned all about resources and conservation in a visual, hands-on setting. Washington State University's Raptor Club members came down again this year to present Birds of Prey at lunchtime. Kids ate their lunch in the grass as they looked on at injured birds and listened to survival stories. Biggest crowd-pleaser? The barn owl.

Throughout both days, classes moved through a variety of environmental stations, in and outside the arena, which showcased specific topics.

University of Idaho professor Frank Merickel and assistants showed kids displays full of insects like cockroaches, butterflies, spiders, and maybe the biggest hit of all-stick bugs- at the entomology station. Kids oohed and aahed as they took turns letting the stick bugs crawl up their arms and Merickel explained why these insects, and others, are important in the scope of habitat. As the horn blew alerting classes to move to the next station,

chatter could be heard about the "cool bugs," and the marveled kids skipped along to the archaeology station.

Diane Mallikan, a Spalding Park ranger, talked about Nez Perce Indian

table covered with animal furs drew kids' attention in as they could feel all the soft hides. Kids then headed outside under the sun where they were able to run around and interact

with one another, all the while learning the elements of habitat in disguise of a game!

Nearby at the fisheries station, kids enjoyed playing another kind of game, this one illustrating the life cycle of salmon. Michelle Jones, a Lewis & Clark State College student and new instructor this year, marked off a section of grass where on each end kids lined up and tried to get from one

side to the other while maneuvering through obstacles like a moving jump rope (symbolizing a dam turbine). Kids were laughing and having fun as they struggled through the creative obstacles as they tried to reach the "ocean", or the other side of the lawn. Kids were still full of the great energy from the fisheries station as they

moved to geology.

Professor Tom Walker from Lewis & Clark State College taught the geology station. At this station, Walker



First Place Winner 2011: Madelyn Parkey
All Saints Catholic School
right: the barn owl

history and why having knowledge of this and other cultures is important to archaeology. Kids gathered around and looked at all of the artifacts Mallikan brought along like leather items, moccasins and arrowheads. Kids especially liked the "digger" tool and hearing about how artifacts are found and excavated.

The wildlife station was provided by the Idaho Department of Fish and Game and instructed by Jen Bruns. A



continued on page 4

Water Efficiency, *continued from page 2*

Demand-Side Strategies for Water Suppliers

Water Rates - One of the most effective ways to reduce demand for water is to establish rates that escalate as more water is used. The following documents provide examples of effective rate management:

Full-Cost Pricing When measured as a percentage of household income, the U.S. pays less for water/wastewater bills than other developed countries. Because of this, the public has been led to believe that water is readily available and cheap. We need to fundamentally shift thinking in this area to meet our essential infrastructure needs. Pricing that recovers the costs of building, operating, and maintaining a system is absolutely essential to achieving sustainability. Drinking water and wastewater utilities must be able to price water to reflect the full costs of treatment and delivery.

Small System Guide to Rate Setting : Document found on epa.gov.

Water Rates and Rate Structures: Document found on epa.gov

Rate Checkup™ : Software program

Consumer Efficiency - Consumers can reduce water use by installing water efficient products or employing efficiency practices, such as turning the water off while brushing teeth or running washing machines only when they are full. Water systems can promote these actions through consumer rebate and education programs.

EPA WaterSense Program - For information on water efficient products and practices, including information about utilities offering rebates for WaterSense-labeled products. By becoming a WaterSense program partner, water systems can receive tools they can use to promote their own water efficiency programs.

Water information courtesy the United States Environmental Protection Agency (EPA) [www. http://water.epa.gov/infrastructure/sustain/wec_wp.cfm](http://water.epa.gov/infrastructure/sustain/wec_wp.cfm)

2011 NACD Legislative Conference

July 18 - 19, 2011 • Washington, D.C.

NACD is eager for conservation leaders from across the nation to join us in Washington, D.C. for the 2011 Summer Board Meeting and Legislative Conference, slated for July 18-19, 2011. The popular annual event will allow NACD members to learn more about policy issues impacting conservation at both local and national levels. The Conference will be held at the Washington Court Hotel, conveniently located within walking distance of Union Station, the U.S. Capitol Building and the National Mall.

This year's exciting program includes informative speakers, meetings with your members of Congress, and updates on important issues such as the 2012 Farm Bill. The meeting will also include a special Wednesday workshop, "Kicking your Conservation Message into High Gear," so be sure to arrange your travel plans to include this great opportunity. While you are here, take in D.C.'s many summertime activities like the concerts by military bands, the National Mall, museums, bus tours and more. For more information, log on to www.nacdnet.org.

Information provided by <http://www.nacdnet.org/events/legconference/>



In Advance of Markup, NACD Calls for Fair Treatment of Agriculture Conservation Programs

WASHINGTON, D.C.—May 31, 2011—The National Association of Conservation Districts (NACD) joined with more than 50 groups representing conservation, environment and agriculture in sending a letter to the House Appropriations Committee opposing proposed cuts to agricultural conservation programs in the fiscal year 2012 agriculture appropriations legislation. The bill is scheduled for Committee markup later this afternoon.

"While we certainly understand and appreciate the need to balance the nation's budget, any proposed cuts should be fair and equitable across the board. Unfairly targeting conservation and agriculture would have devastating impacts reaching far beyond rural America," said NACD President Gene Schmidt. "Technical assistance and Farm Bill conservation programs help ensure clean air, clean water and productive soils, in addition to helping decrease energy use and reduce damage from severe weather and other natural

disasters. With increased pressures on working lands to produce food, feed, fuel and fiber for our nation and the world, these programs are needed now more than ever."

The proposed FY12 agriculture appropriations legislation includes nearly \$1 billion in cuts to Farm Bill conservation programs, in addition to the \$500 million already cut from Farm Bill conservation accounts during the FY11 appropriations process. Specifically, the bill proposes cuts to the Conservation

Stewardship Program, the Wetlands Reserve Program and the Wildlife Habitat Incentive Program. It would also reduce funding for conservation technical assistance (CTA) in the Natural Resource Conservation Service (NRCS) budget by nearly \$100 million. Conservation districts across the nation work closely with NRCS in the delivery of CTA to help farmers, ranchers and foresters voluntarily address resource concerns and comply

with local, state and federal regulations. The demand for enrollment in these programs routinely exceeds the funds available, even without any cuts.

"...Conservation programs are crucial to the health and viability of agriculture and rural America," stated the groups in the letter. "Failure to support our farmers, ranchers, foresters, and natural resource base today will jeopardize our agricultural industry, drive up long term costs for environmental mitigation, and threaten our nation's food security."

To view the full letter, log on to www.nacdnet.org

The National Association of Conservation Districts is the non-profit organization that represents the nation's 3,000 conservation districts and 17,000 men and women who serve on their governing boards. For almost 70 years, local conservation districts have worked with cooperating landowners and managers of private working lands to help them plan and apply effective conservation practices. NACD's website is at www.nacdnet.org.

Environmental Awareness Days 2011, continued from page 1

asked the kids lots of questions, like, “What is sediment?” and “How big would you say a boulder is?” Each question prompted dozens of hands to dart up into the air. Walker’s passion

became even more interested when Sanford mentioned Mad Cow Disease, at which point a wide-eyed little boy raised his hand and quietly asked, “But why are cows so mad?”



The wildlife station

for both teaching and geology made for an excellent station for each class. The kids really enjoyed picking up rock samples and looking at Walker’s display. Never a dull moment in geology thanks to Walker’s vigor.

Soils with Eileen Rowan of the Idaho Soil & Water Conservation Commission gave kids a lesson in soil conservation including the hows and whys of soil importance. Most of the kids seemed amazed that dirt—soil rather—was as interesting as it is!

Kerry Sanford, University of Idaho Nez Perce County Extension, visited with kids over at the livestock station. Sanford explained livestock tagging and showed them an electronic device used for tracking and sourcing livestock. In one session, kids

learned what they can be used for and the many different values like shade, energy conservation, remembrance of others and many, many more. After instructor Bill Furstenau of the Nez Perce County Forestry Advisory Board gave an overview of different tree types, the kids were shown samples and then asked to see if they could name them. They seemed to have a great time and even got to take home their own Ponderosa pine and Tamarack to plant.

Planting was something discussed next door at the conservation station, too. Classes were taught what conservation really means and what we can do to apply it. Clark Chris-

At the forestry station, kids learned all about trees...which also supported this year’s Environmental Awareness Days theme, “Forests for People: More Than You Can Imagine”. Kids were able to look at tree samples while they

tiansen, Idaho Department of Lands, explained the importance of top soil when planting crops. Christiansen also explained different ways the kids could go home and conserve resources (taking shorter showers, not letting water run when brushing teeth), and how producers apply conservation practices (strip farming, direct seeding, fertilizer management, etc.). Kids were also interested to learn what it’s like fighting forest fires. With all the appropriate fire protection gear that Christiansen brought along, a student from each class volunteered to put all the gear on (coat, hat, gloves, boots, etc) and hold the tools that firemen carry with them. The kids couldn’t believe how heavy everything was!

Phil Kaufman, local producer, taught kids about agriculture. Kids learned all about



above: Eileen Rowan showing students different soils at soils station
below: Students take turns holding stick bugs
lower left: Student wears fire gear at the conservation station



Special thanks to Kayla Dau, Environmental Awareness Days coordinator, and the following volunteers and sponsors:

Volunteers 2011

- Bardell Faux
- Jason Fisher
- Brian Hill
- Ben Thompson
- Caley Jones
- Ashley Grow
- Erin Morra
- Serena Jones
- Ethan Mainini
- Colin Boyer
- Amber Whitfield
- Jeff Yell
- Byer Danniell
- Brittney Phillips
- Paul Nielson
- Annet VonBargen
- Shannon Moudy
- Bonnie Waldemarson
- Devin Kinered
- Bill Jones
- Terry Norwood
- Linda Norwood
- Taylor Eglund
- Jill Charpentier
- Pat Havens
- Chuck Havens

- Lydia Clayton
- Julia Carley
- Nick Harris
- Becky Mahurin
- Dianna Menzel
- Hunter Chapman
- Ashley Grow
- Valary Pfefferkorn
- Dylan Taylor
- Willy Sinkiwicz
- WA-ID Resource Center
- LCSC Americorps

Sponsors 2011

- Farm Service Agency
- Lewiston High School
- NRCS
- Hell’s Gate State Park
- Rodeo Round-Up Association
- Starbucks
- Avista Corporation
- PrintCraft

- Granny’s Thriftshop
- Rooster’s Waterfront Restaurant
- Domino’s Pizza
- Culdesac PTSA
- Happy Day Corporation
- Orchard’s Lanes
- Primeland
- Idaho Women in Timber
- Pepsi Cola

Donors 2011

- Hells Gate State Park
- Rodeo Round-up Association
- Starbucks
- Avista Corporation
- PrintCraft
- Granny’s Thriftshop
- Rooster’s Waterfront Restaurant
- Domino’s Pizza
- Culdesac PTSA

- Happy Day Corporation
- Orchard’s Lanes
- Primeland
- Idaho Women in Timber
- Pepsi Cola
- Schools 2011
- Lapwai Middle School
- All Saints Catholic School
- Centennial Elementary

- McGhee Elementary
- McSorley Elementary
- Orchards Elementary
- Webster Elementary
- Whitman Elementary
- Grantham Elementary
- Parkway Elementary
- Camelot Elementary

District Project Briefs

crops and farming. They let out their 5th-6th grade energy by participating in a relay where they raced for jars full of seeds like wheat and canola. On the second day of the event, Kaufman offered to bring his tractor in and park it in the arena so the kids could get an up-close and personal look...which they loved.

Congratulations to our 1st place "Forests for People: More than you can Imagine" poster contest winner Madelyn Parkey, All Saints Catholic School. Congratulations to 2nd



*Kids guess tree names at the Forestry Station
Phil Kaufman sets out seed jars for students at the Agriculture Station*

place winner Evelyn Bohnee, Lapwai Middle School, and 3rd place winner Iris Domebo, Lapwai Middle School.

Almost all of our instructors were returning from last year and previous years and the District thanks them enormously for all their hard work, willingness to work with the kids, great attitude and expertise they each shared. Without all this, Environmental Awareness Days would not have been the success that it was. The District also thanks all schools participating this year; we had a great time together and hope you return next year!

Tammany Road Erosion Project

DEQ 319 funded

Landowner meetings have been held regarding the Vollmer Road project. Staff is collecting water quality data



on a weekly basis from Tammany Creek. Efforts are underway to complete the survey necessary to move into

project engineering and design. This is a high priority project for this summer.

Big Canyon Creek Project

Pacific Salmon funded

District staff will continue to collect field inventory data in the Big Canyon Creek watershed over the next few months. Weed control will also be implemented at various sites.



Catholic Creek Project

Pacific Salmon funded

This summer, District staff will finish the stream inventory that was started last year. Staff will walk the remaining portions of the watershed to collect data.

The Catholic Creek Watershed Plan is currently 80 percent complete. The document outlines habitat restoration goals and includes data and other information on Catholic Creek.

Landowners are encouraged to contact Brenda Boyer at (208) 843-2931 for questions/comments.



Catholic Creek watershed overview



Tree planting site in Cottonwood Creek watershed

Cottonwood Creek

SRBA funded

Cottonwood Creek projects keep the District busy. Landowners keep in mind the following types of projects listed below that are eligible for cost-share.

- Sediment control practices
- Grass Seeding
- Erosion control structures
- Fencing
- Off-site watering facilities
- Livestock waste practices
- Tree plantings
- Forest road improvement projects

Everyone Lives in a Watershed

Reprinted article by contributor Ken Clark

A watershed is an area of land from which all water drains into a common waterbody. Watersheds come in many shapes and sizes: hilly, flat, rocky, forested, and marshland.

Watersheds can be quite small, such as a few hundred acres draining into a small creek, or large, like the 9,600 square mile drainage basin of the Clearwater River. A watershed can include a river or the tributaries that empty into it along its course. Several small watersheds make up large watersheds, creating a series of watersheds within a larger area called a drainage basin.

Water enters a watershed through both direct and indirect means. Precipitation in the form of rain or snow enters directly as surface runoff or indirectly as water seeping through the soil via the groundwater system.

Pollution in a Watershed

Events occurring in the smaller watersheds, whether good or bad, ultimately affect the quality of water that flows into the larger watershed and into the downstream rivers and lakes.

Water is not the only substance to end up in stream systems. Chemical pollutants, fertilizers, pesticides, trash, and debris all enter streams with the water draining from the watershed. These foreign substances come from many sources and can be detrimental to the health of stream systems by continu-

ally degrading surrounding habitats and the life they support.

Even if a home is not next to a stream, it is in a watershed, and common household practices can contribute to overall pollution entering stream systems. Actions taken anywhere in a watershed can affect both the quality and quantity of stream water...and ultimately the water supply.



Make a Difference

Factor in the cost of lost habitat when establishing the cost/benefit analysis for development.

Maintain buffer zones on both sides of streams sufficient in area to accommodate the volume of water delivered during storms.

- Restore and maintain wetlands. Wetlands act as filtration and flood control mechanisms.
- Use permeable paving materials that allow rain to penetrate the surface rather than running off directly into a stream.
- Maintain natural vegetation as much as possible. A sapling cannot replace benefits of a mature tree.
- Control soil erosion on development sites.
- Promote an environmentally friendly setting by restoring damaged areas, maintaining the quality of streams, and encouraging wildlife.

Nez Perce Tribe BioControl Center: Workshops and BC Collection Days

Workshops 2011 - start at 9am completed by 3 pm

Date	County	City	Location	Address	CWMA	Weed
May 18, Wed..	Boundary	Bonnors Ferry	Boundary County Extension	6447 Kootenai Street, Sandpoint	SCWAM	Dalmatian toadflax
June 23, Thurs.	Nez Perce	Lapwai	Nez Perce Bio-control Center	22776 Bever Road, Lapwai	CBCWMA	Yellow starthistle
June 24, Fri.	Clearwater	Orofino	Tribal Community Center	3402 Hwy 12, Orofino	CBCWMA	Yellow starthistle
June 30, Thurs.	Lewis	Kamiah	Tribal Community Center	401 Idaho Street	CBCWMA	Yellow starthistle
July 6, Wed.	Clearwater	Orofino	Tribal Community Center	3402 Hwy 12, Orofino	CBCWMA	S. knapweed
July 14, Wed.	Boundary	Bonnors Ferry	Boundary County Extension	6447 Kootenai Street, Bonnors Ferry	SCWMA	S. knapweed
July 15, Thrus.	Bonner	Sandpoint	Bonner County Extension	4205 N. Boyer Ave, Sandpoint	SCWMA	S. knapweed
July 18, Mon.	Kootenai	Athol	Athol Community Center	30355 3rd Street, Athol	IECWMA	S. knapweed
Aug. 12, Friday	Kootenai	Athol	Athol Community Center	30355 3rd Street, Athol	IECWMA	S. knapweed

Collection Days-BC Agents - start at 9am ends by 3 pm

May 25, Wed	Nez Perce	Lapwai	Nez Perce Bio-control Center	22776 Beaver Road, Lapwai, ID	CBCWMA	Dalmatian toadflax
June 22, Wed.	Nez Perce	Lenore	Lenore Community Center	37350 Hwy 12, Lenore	CBCWMA	Yellow starthistle
June 29, Wed.	Nez Perce	Lenore	Lenore Community Center	37350 Hwy 12, Lenore	CBCWMA	Yellow starthistle
July 5, Tues.	Clearwater	Orofino	Tribal Community Center	3402 Hwy 12, Orofino	CBCWMA	S. knapweed

To Register: Call Paul Brusven, Coordinator 208-843-9374 ext. 1 or email: pbrusven@nezperce.org

District Project Briefs, continued from page 5

Lower Clearwater Forestry Project

SRBA funded

This summer the District will be working to begin a second round of projects. Due to high snow levels in many of the potential projects sites, it made site visits and ranking procedures difficult. The District will be finishing site visits and designing new projects to be implemented mid-summer or early fall. For more information contact Gabe McMasters at the District (208) 843-2931.



implemented mid-summer or early fall. For more information contact Gabe McMasters at the District (208) 843-2931.



Knotweed can be seen on several portions of Lapwai Creek like this one shown above

Lapwai Creek

BPA funded

Activities within Lapwai Creek may include fence installation, streambank restoration activities and tree plantings. Summer crews will be contacting landowners in the next few months requesting permission to access land in order to treat knotweed. For more information contact Pat Sullivan at the District (208) 843-2931.

Summer Field Season is Here

It is that time of year again when the District office is busy with summer field projects. The District has several projects on the schedule for the next few months. Field crews were deployed at the end of May to gather stream inventory in the first watershed scheduled—Tammany Creek. Stream Assessment Methodology is used to gather stream inventory when crews visit streams. Trained staff walk the length of the stream to assess resources and needs. Measurements are taken that determine stream health including cross-sections for slope and pebble counting which helps determine average rock size and ultimately type of fish habitat. After data is gathered in the field, it is compiled and analyzed internally in order to evaluate the watershed’s needs and target specific projects. Stream data will continue to be gathered this month and through August.

Aside from stream inventory, summer field crew will also treat Knotweed and Orange hawkweed. The noxious weeds will be treated at predetermined sites using techniques the



Field crews of three like this one shown above gather stream inventory in local watersheds.



Knotweed can grow upwards of 10 feet tall, taking over habitat as shown at this site that District staff will treat this summer.

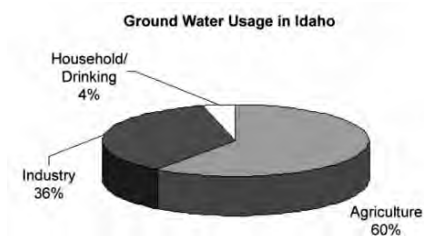
District has implemented in the past. Knotweed will be treated by chemical injection at the stem and hawkweed sprayed. Kill rate will be closely monitored following the weeks of treatment and at which point crews may re-visit the site if more treatment should be needed.

Note to landowners: The District requires your permission before accessing any land designated within our watershed projects. You may be contacted by mail or phone.

The Water Cycle, continued from page 8

Water also infiltrates the ground where it renews the water supply. First it moves through the soil and an “unsaturated zone,” where air fills most of the pores (spaces) in the soil and rock. Eventually, the water may reach an area where the pores between the rock and sediment are filled with water (the “saturated zone”). This zone is referred to as an aquifer. In an unconfined aquifer, the top of this zone is called the water table; the water in an aquifer is ground water.

Eventually, the water may leave the aquifer. Ground water can flow naturally from springs or canyon walls, supply water to rivers, or be pulled into wells. Once on the surface, the water may evaporate or again infiltrate the earth’s surface as the cycle continues.



How Ground Water is Used in Idaho

Ground water is a vital resource in Idaho. Around nine billion gallons of ground water are withdrawn every day for various uses.

The water that flows from your tap likely comes from ground water, as it provides 95% of the state’s drinking water. However, drinking water accounts for only around 4% of total ground water withdrawals each year.

Agriculture uses approximately 60% of the total ground water withdrawn. The water is used for irrigation of such crops as potatoes, sugarbeets, and barley. Aquaculture also relies on ground water, as do industrial processes that use ground water for food processing, fertilizer production, and high-tech manufacturing.

Information provided by the Department of Environmental Quality. For more information, please see www.deq.idaho.gov/water



Nez Perce Soil and Water Conservation District

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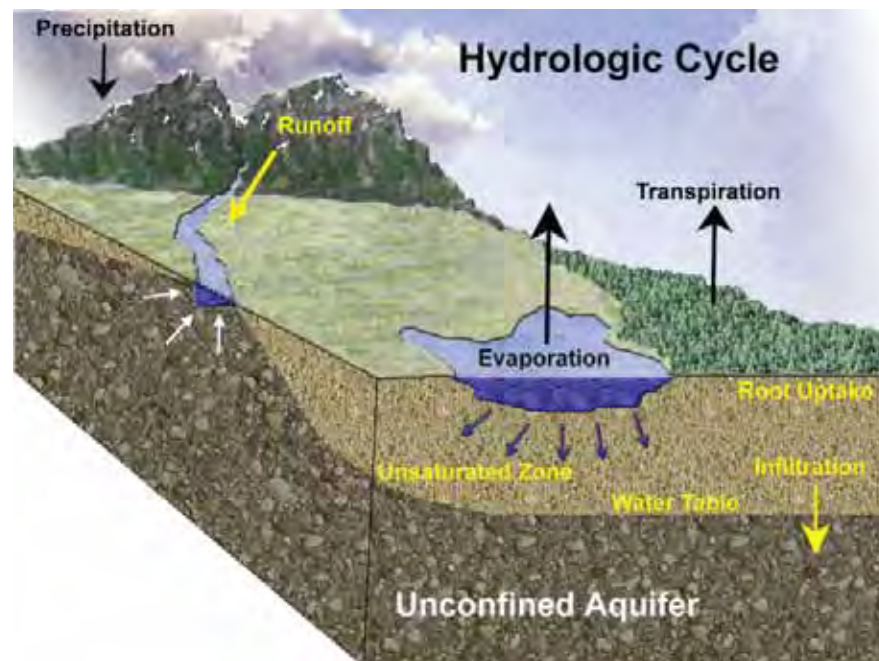
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The Water Cycle and Ground Water Movement

Ground water is simply water beneath the earth’s surface. It is the water that fills the natural open spaces in soil and rocks underground in much the same way as water fills a sponge. It can be found at various depths at any location beneath



the earth’s surface. Springs are ground water that flows out of the earth.

Ground water is part of the water, or hydrologic, cycle, which is the cyclic movement of water from the air to the earth, into the earth, back to the surface, and eventually back to the air. Not all water completes all of these steps.

When water falls to the earth as precipitation, some of it runs off the earth’s surface into streams, rivers, lakes, and oceans. The sun’s heat causes some water to evaporate; other water forms a vapor as it leaves plants (transpiration). Evaporation and transpiration provide the moisture that ultimately forms clouds and creates precipitation.

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