

**Journal #3001**

**from sdc**

**12.10.13**

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*Thanks for the incoming comments. Sorry the volume of information “constipates” some of your systems.....that is why you should be active in your local Broadband developments!*

*A sample:*

*“And they said it couldn't be done!!! :~)”*

*“I appreciate being able to keep up to date with what is happening in the US by reading your news letter.....as I live in London and work for the US Embassy here.”*

*“THE ONLY WAY I STAY 'SMART' ON INDIAN/TODAY'S ISSUES”*

Date: December 9, 2013

Contact: Jessica Kershaw (DOI) 202-208-6416

**Interior, Oglala Sioux Tribe Announce First Cooperative Agreement to Facilitate Purchase of Fractionated Land under Cobell Settlement**

*Oglala Sioux Reservation is Among Most Fractionated in the United States; First Offers Expected to be Made before the End of the Year*

**WASHINGTON, DC** – The Department of the Interior today announced that it has finalized the first cooperative agreement to facilitate the purchase of individual interests in highly fractionated trust lands to consolidate ownership for tribes. The agreement between the Land Buy-Back Program for Tribal Nations (Buy-Back Program) and the Oglala Sioux Tribe of the Pine Ridge Reservation outlines the strategy and resources to be provided to the Tribe’s leadership to facilitate owner outreach and education about the Buy-Back Program.

The Buy-Back Program was created to implement the land consolidation component of the Cobell Settlement which provided for a \$1.9 billion fund to consolidate fractional land interests across Indian Country. The Buy-Back Program allows interested individual owners to receive payments for voluntarily selling their land. All lands sold will immediately be held in trust for

the tribe with jurisdiction.

Outreach is already underway on the Pine Ridge Reservation, and the Department intends to make the first offers by the end of 2013. The reservation is among the most fractionated in the United States. Due to the nature of fractionation, the land interests on Pine Ridge are owned by various individuals, including members of other tribes.

The Buy-Back Program personnel will hold an outreach event this Saturday at Little Wound School in Kyle, South Dakota at 1:00pm CST to present information about upcoming offers, and engage in one-on-one discussions with individual landowners. For more information on the event, individuals can contact (605) 867-2610.

“It is a priority for the Obama Administration to reduce fractionation and implement the Buy-Back Program in as fair and equitable a manner as possible,” said Interior Secretary Sally Jewell. “Cooperative agreements give us an opportunity to work together, nation-to-nation, to ensure that the Program’s implementation is tailored to the specific priorities of each tribe. This agreement reflects a spirit of mutual respect and teamwork as we work together to address this opportunity.”

Interior holds about 56 million acres in trust for American Indians. More than 10 million acres are held for individual American Indians and nearly 46 million acres are held for Indian tribes. The fractionation of tribal lands has locked away resources and decision making from tribes. In Pine Ridge alone, there are approximately 6,028 tracts with 195,862 purchasable fractional interests. This has made it increasingly difficult to manage the land for economic development and other uses.

“I am very happy with the agreement and glad that was done,” said Oglala Sioux Tribe President Bryan V. Brewer. “Our Outreach workers are out meeting with the people in the communities. I am hoping that we will be able to start buying the fractionated land that is out there with the money that is available. We are also anticipating the first offer to be complete within the month.”

Following nation-to-nation consultations with tribal leaders, the Department released an [Updated Implementation Plan](#) earlier this year that significantly expands Program implementation beyond Interior’s initial strategy to launch pilot efforts with less than a dozen tribes. This expanded strategy will allow for greater flexibility and meaningful engagement with tribal governments across Indian Country. An [open solicitation](#) period will be held through March 14, 2014, during which tribes with jurisdiction over the most fractionated locations (approximately 90 percent) are invited to submit letters of interest or cooperative agreement applications for participation in the program. Significant outreach, mapping and mineral evaluations are already occurring at many locations.

Outreach and tribal engagement will also continue with the tribes that represent the locations

with the remaining 10 percent of fractionated lands, and flexible purchase ceilings will be used to protect against the risk of premature exhaustion of the available funds.

There are a number of steps that tribal nations can take now to prepare for involvement in the Buy-Back Program, including increasing owner awareness of the value and benefits of participation in the Program and designating an authorized tribal point of contact to engage with the Program.

For more information, [click here](#).

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**[These slabs of recycled denim and resin are weirdly beautiful](#)**

And they can be used for architectural projects, as well as for nifty consumer designs.  
BY SARAH LASKOW

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**\*The Great Basin American Indian Artists Web Pages Are Now Live!**

Indian Territory is developing a comprehensive Great Basin American Indian Artist Listing, and the web page is now live. Artists who choose to participate will be placed on the Indian Territory website at no cost.

This is an opportunity for American Indians to market themselves and their art.

[CLICK HERE](#) to check out the new artist listings.

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**[VIDEO: Chief Derek Nepinak throws out the Indian Act Status Card assigned to him](#)**

[westcoastnativenews.com](http://westcoastnativenews.com)

[During a presentation at the National Treaty Gathering in Onion Lake, SK about the Real Indigenous Treaty Rights and a National Treaty Alliance](#)

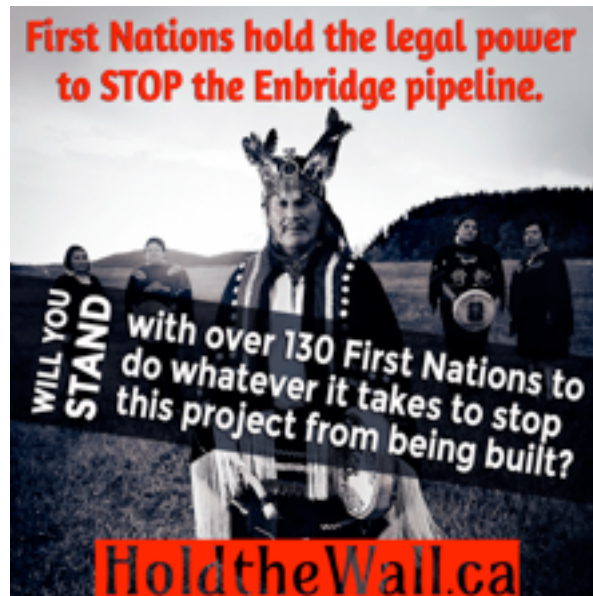
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**[Hawaii Mayor Signs Biotech, GMO Ban Into Law](#)**

[huffingtonpost.com](http://huffingtonpost.com)

[HONOLULU -- Mayor Billy Kenoi signed Bill 113 into law on Thursday, prohibiting biotech companies from operating on the Big Island and banning farmers from growing any new genetically altered crops.](#)

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**Intertribal Territories Recovery Institute**  
[Home](#)  
[Policy & Legislative Initiatives](#)

<http://www.tribalterritories.org/>

[Tribal Water Working Group](#)  
[Contact Us](#)  
[Links/Documents](#)

The goal and vision of the Intertribal Territories [Recovery](#) Institute is restoration of Tribal and Pueblo lands and water systems. Much of our lands and waters were illegally taken, forcefully ceded, or otherwise disposed of, by certain governmental, corporate and private entities. Today these practices [continue](#) through the illegal taking of our lands, waters and resources. The ITRI is committed to halting these practices and seeking return and transfer of lands, water and resources within our treaty boundaries and ceded areas.

**Activities**

- **Assist Tribes and Pueblos with the development of Land Consolidation Plans which identify Treaty and Executive Order boundaries as well as ceded areas;**
- **Assist Tribes and Pueblos with the development of Land Acquisition Strategies which promote restoration of native lands and water systems, using existing laws and declarations such as the U.S. Constitution, the U.N. Declaration on the Rights of Indigenous Peoples, the U.N Declaration on Clean Water, the Federal Land Policy & Management Act (FLPMA), the Indian Self-Determination & Education Assistance Act (ISDEAA) and the Base Realignment & Closure Act (BRAC);**
- **Implementation of protective and tribally determined ordinances to manage and protect - water, land, air and resources - within designated tribal territories;**
- **Development of Water and Land Recovery Curriculum for use in Tribal [Colleges](#);**
- **Promote an Internship program with partner organizations: Native American Land Conservancy; Indigenous Environmental Network and National Tribal Environmental Council;**
- **Conduct an Annual Water & Land Recovery Summit;**
- **Provide regional educational forums on existing and successful Tribal Land and Water Recovery/Management Models.**

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**In [Solar Power](#) Lies Path to Reducing Water Use For Energy**

Tuesday, 31 August 2010 10:12

*Concern, though, that desert solar power plants could compromise desert habitat.*

Developers have presented the federal Bureau of Land Management with 75 applications to build solar facilities in the Mojave desert.

**By Nicholas L. Cain      Circle of Blue**

California's Mojave Desert, which drivers cross on Interstate 15 between Los Angeles and Las Vegas, encompasses 20 million acres of land and three national parks, hosts 2,500 species of plants and animals, is shadowed by mountain ridges that rise to nearly 12,000 feet, and has the largest collection of solar thermal power plants in the world.

Between 1984 and 1991, Luz International Ltd., a Los Angeles—based engineering company, developed and built nine solar electricity generating stations in the Mojave that produce a total of 354 megawatts, about the same amount as a small coal-fired utility.

### **More From The Series**

#### **Tar Sands**

[Tar Sands Oil Production, Poses Major Water Use Challenges](#)

#### **Natural Gas**

[Deep Frack Dilemma](#)

#### **Coal**

[Coal Confronts Water Scarcity](#)

#### **Thermal Power**

[Thermopower Shift](#)

Six years ago Arnold Goldman, the founder of Luz, formed BrightSource Energy, moved the company to Oakland, and got busy modernizing the design and preparing for the biggest dash for cash ever seen in the solar thermal industry.

Developers have presented the federal Bureau of Land Management (BLM), which oversees almost all of the Mojave, with 75 applications to build solar facilities in the desert that could affect 647,000 acres, according to *Here Comes The Sun*, a March 2009 study by Oregon State University graduate students. The California Energy Commission is close to final decisions on the first five solar thermal plants—[including one proposed by BrightSource](#)—that together would span 22,000 acres, generate 2,470 megawatts and cost roughly \$15 billion.

The BLM is reviewing 33 other solar power plant applications in Arizona that cover 452,000 acres of federal land in the Sonoran Desert, mostly in the south and southwest sections of the state, according to [a 21-page report released in July by Senator John Kyl](#) (R-Ariz.). Of those proposed plants, 29 would use some form of solar thermal technology. Ten more applications for solar plants are under review by state environmental authorities in Arizona.

Southern Nevada is the focus of 63 utility-scale solar plants, according to the BLM.

#### **Solar's Water Risks, Alternatives**

Tens of billions of dollars are on the table for [steam generator builders like Siemens and General Electric Co.](#), for contractors like Bechtel Corp., and thousands of skilled workers anxious to earn paychecks building big showcases of what's possible in the emerging clean energy economy. But also in play is the credibility of the Obama administration, which is issuing billion-dollar [loan](#) guarantees and fast [tracking](#) projects on federal land, as well as whether utility-scale solar plants can significantly reduce environmental risks and still provide southern California home and business owners competitively-priced electricity.

On that last point there is some dispute. In the competition between energy and water, none of the market-ready energy alternatives are free of environmental risks, and only a handful eliminate concerns about water withdrawals from lakes, rivers and aquifers, as well as water consumption from evaporation.

Solar photovoltaic power, which generates energy directly from sunlight, uses virtually no water. Six utility-scale solar PV plants were put online last year in the United States, according to the Solar Energy Industries Association (SEIA), a trade group.

The U.S. wind energy industry, which generated 35,000 megawatts last year, and has been growing by more than 35 percent annually over the last five years, uses no water. The American Wind Energy Association (AWEA), a trade group, said in its annual report that wind generators prevented emissions of 62 million tons of carbon last year, and saved 20 billion gallons of water.

**Table 1: Water Consumption by Power Generation Technology**

<b>Technology</b>	<b>G/MWhr</b>
Estimate for Ivanpah solar-thermal (air cooled)	16
Solar photovoltaic (with panel washing)	30
Solar parabolic trough (air cooled)	78
Combined Cycle Gas (evaporative)	200
Coal (evaporative)	500
Solar power tower (evaporative)	600
Solar parabolic trough (evaporative)	800

**Source:** Estimate for Ivanpah based on calculations from public data; other data from “Concentrating Solar Power Commercial Application Study: Reducing Water Consumption of Concentrating Solar Power Electricity Generation,” Report to Congress, U.S. Department of Energy. Accessed 7/26/10.

Also coming online is energy generated from wave power that does not use fresh water. The country’s first utility-scale wave power project is the 1.5-megawatt wave energy park located 2.5 miles off the Oregon coast near Reedsport. It uses PowerBuoys, manufactured in Oregon, that move up and down with wave motion, causing an internal piston-like structure to drive an electrical generator.

Solar thermal designs that focus sunlight on water to generate steam to power turbines eliminate climate-changing emissions. They also eliminate the need to produce coal, natural gas and uranium, all of which are significant sources of land damage, as well as air and water pollution.

But utility scale plants cover thousands of acres. The Center for Biological Diversity and the local chapter of the Sierra Club assert that the big solar plants, photovoltaic or concentrated solar power (CSP), will damage sensitive plants and put more pressure on the endangered desert tortoise.

More significantly, researchers at several federal agencies and in Congress have expressed concern about supplies of water that the concentrated solar plants use for cooling, water that is already scarce in the desert regions of California, the Southwest and the Rocky Mountain states. Solar thermal plants that use conventional cooling technology withdraw 98 percent less water

from aquifers and rivers than coal and nuclear plants, and 90 percent less than natural gas-fired power plants, according to the Department of Energy. But they consume through evaporation from cooling three times as much water as a coal-fired power plant. A conventionally cooled solar thermal plant uses 740 to 890 gallons to generate one megawatt hour of electricity. A conventionally cooled coal plants uses 200 to 300 gallons, according to the Energy Department.

In May, Sen. Kyl issued a report on water supplies and solar thermal plants that further clarified these concerns. The Energy Department's National Renewable Energy Laboratory, said the report, estimated that by 2050 CSP plants could produce 53 gigawatts of electricity—enough to power tens of millions of homes in states like Arizona, California, New Mexico, Nevada and Texas. The nonpartisan Congressional Research Service estimated that the total water use for these projects, using conventional cooling methods, would be 164 billion gallons of water a year. That's roughly [the same amount of water that the entire U.S. coal-fired utility industry consumes in 50 days.](#)

### **Arizona, California Set Solar Pace**

In Arizona, the CSP plants would consume about a third — an estimated 53 billion gallons of water a year — “representing the largest percentage of any state's water requirement to produce solar power,” according to the Kyl report. National Park Service Director Jon Jarvis warned the BLM in a formal memorandum last year that federal approval of dozens of solar plants in southern Nevada could affect water supplies across the region.

“Arizona lawmakers have an obligation to protect the state's limited water supply and put its water resources to their highest and best use,” said the authors of the Kyl report.” Using Arizona's water supplies to produce conventional CSP that will most likely be exported out of state does neither.”

“Despite the seriousness of water constraints,” the report added, “solar power companies have largely ignored water concerns and continue to propose water-intensive conventional CSP plants in Arizona.”

### **Solar photovoltaic power plants use virtually no water.**

In California, the state energy commission has responded to such concerns by requiring water-conserving air-cooled systems. BrightSource's proposed 370-megawatt Ivanpah Solar Electrical Generating System plant will use 100 acre-feet or 32.5 million gallons of water a year, or about what a similar-size coal-fired plant consumes in a few days.

“One hundred acre feet of water is not a lot of water, but given the arid location, project developers and regulators must ensure there are no irreversible local impacts,” said Peter H. Gleick, president of the Pacific Institute, one of the nation's foremost water research organizations and Circle of Blue's parent.

Indeed, say authorities, when compared to conventional coal and nuclear powered thermal plants, the BrightSource solar generating station by itself is a water miser. The same is true for the \$6 billion, 1,000-megawatt Blythe Solar Power Project in Riverside County that is nearing final federal and state approval. It will use 196 million gallons of water a year. The nearly same

size 995-megawatt Cholla Power Plant in northeastern Arizona near Holbrook, withdraws and uses nearly 43 million gallons of water a day.

California, according to the Energy Information Administration, is home to 1,102 megawatts of utility-scale solar generating capacity, which is most of the solar generating capacity in the U.S. The next highest state is New Jersey, with 128 megawatts of solar generating capacity. Last year, according to the Energy Department, 25 new solar thermal and photovoltaic plants came on line or began construction, and will add 145 megawatts of generating capacity. This year, 13 more solar plants are scheduled to come online or begin construction, and add 468 megawatts of capacity.

When compared to development in the fossil fuel sector, solar's additional capacity is tiny. In 2009 and 2010, utilities added 25 new coal-fired plants that have a generating capacity of 11,000 megawatts, said the Energy Department. And 186 natural gas-fired plants were under development during the same period that generate over 21,000 megawatts.

The sun, in other words, accounts for well under one percent of all electricity in a country that has over 1 million megawatts of electrical generating capacity, according to the Energy Department.

California authorities are anxious to change that. On August 25, the California Energy Commission approved the construction of the proposed 250-megawatt Beacon Solar Energy Project, the first solar thermal power project permitted in 20 years. The last solar thermal power plants that the Energy Commission approved were Luz Solar Electric Generating Systems (SEGS) IX and Luz SEGS X in February 1990.

Earlier, on Aug. 3 a three-member panel of the California Energy Commission recommended that the full five-member board grant BrightSource a construction permit for the Ivanpah plant. The BLM must also approve construction. But that decision is expected to be a formality. The BLM earlier this month released a favorable environmental impact statement, and in February, the Obama administration awarded BrightSource a \$1.37 billion loan guarantee to build the \$3 billion plant.

The BrightSource design could set a new industry standard for electrical generation and water conservation. It uses a "power tower" surrounded by curved mirrors to focus solar energy on a boiler. In filings with the state, BrightSource said it will obtain the water needed by the facility from on-site wells. Water will be filtered before being used to rinse mirrors or added to the generation process. Runoff from mirror-washing will be used to irrigate landscaping.

"One of the significant advantages of power tower technology," according to Keely Wachs, the company's senior director of communications, "is the ability to produce superheated steam, which reduces the efficiency impact to the overall plant when dry cooling."

**Table 2: Water per MWh Used by Ivanpah**

Capacity (MW)	370
Capacity factor	60%
Hours in a year	8,765.8



Total power (MWh/year)	2,061,716.16
Water use (gal/year)	32,585,142.90
Water use (gal/MWh)	15.80

### **Weighing the Environmental Costs, Benefits**

Ileene Anderson, a biologist and public lands director for the Center for Biological Diversity (CBD), a wildlife conservation group, still worries about “overdrawing groundwater aquifers in the Mojave” and nearby regions and that the Ivanpah project is “in the wrong location.”

“Springs in the Clark Mountains are just south and west of the project site,” Anderson said. “We’re very much in favor of solar energy and getting off fossil fuels, but the projects must be sited appropriately.”

BrightSource, in response, noted that it selects sites that are “near roads and existing transmission lines.” The Ivanpah project is within five miles of an existing natural gas power plant and is “bisected by a transmission corridor containing three power lines,” said the company in an email message.

The Natural Resources Defense Council (NRDC), in a January 2009 letter to the energy commission, noted that other area users of groundwater, including a neighboring golf course, had suffered from brackish water intrusion to their wells. Brackish water often contains salt or other minerals and is thus not usable for irrigation.

As to concerns raised by the NRDC that an increase of groundwater pumping could harm the Primm Valley golf course, Gleick noted that, “If I had a choice of where to ‘spend’ my water in the desert, and we do, as a state, I’d far rather see it go to producing solar energy than lush golf greens.”

Indeed, in the competition between energy and water, other states are also grappling with the solar tradeoffs. Solar Millennium AG, a developer of utility scale solar projects, recently decided to change the design of a large solar thermal project it planned for Nevada from wet to dry cooling.

Environmentalists are mixed about whether the affects of solar-thermal outweigh the benefits.

“Sierra Club supports the most efficient power generation technology, but we look at individual projects on a case-by-case basis,” noted spokesman David Graham-Caso. “We’re looking for anything that can help utilities move off coal.”

Anderson of the Center For Biological Diversity notes that although the scale and potential affects of planned solar-thermal projects are a concern, in the “appropriate places” the projects should go forward because “species will be affected by climate change as well, even in the Mojave area. “

*Nicholas L. Cain is an environmental researcher who is studying for a PhD in political science at Claremont Graduate University. He is a former employee of the Pacific Institute. Read more of our Choke Point: U.S. coverage [on Circle of Blue](#).*

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[The mystery of the human intelligence explosion](#) [on.io9.com](#)

Over the past 200,000 years since Homo sapiens evolved, something extraordinary happened. Somehow, we went from being clever monkeys with stone tools, to being insanely brilliant masterminds who use complex language, and control the planet with agriculture and technology. How did we start the intell...

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[Charlie Hill This is Your Life in a Minute](#) [youtube.com](#)

Charlie Hill is an American original. This episode of Your Life in Minute celebrates this legendary stand up comedian. To have your story told in 60 seconds ...

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I am very pleased to invite you to join in the Re-established **Smart Rural Community Roundtable**. This is not a standard rural development workshop. We have two thought provoking experts donating their time and brainpower to help rural communities grab the future. Please see the [additional information attached](#), and plan to join us.

We can establish sites throughout rural Nevada as long as you RSVP to let us know you are coming. While we hope you will join us "in person" via video teleconference, we are also proud to present a new way to join in: Ustream! By clicking on this link <http://www.ustream.tv/channel/smart-rural-communities-roundtable> you can sign up now to attend this event.

You will be able to see the Smart experts and send us your questions - Smart technology at work in rural Nevada.

PLEASE pass this on to your lists of rural leaders, and their urban partners, in multiple fields.

Apologies to recipients for duplication; great minds like yours are on a lot of lists, you know.

**SAVE THE DATE**

**RE-ESTABLISHED SMART RURAL COMMUNITIES ROUNDTABLE**

*Guest Speakers*

**Joe Tavormina - What is Smart Technology?**  
**David LaPlante - How does a smart community use it?**

**See attached for answers to:  
 What is a Smart rural community and who are Joe Tavormina and David LaPlante?**

**When:** December 19, 2013  
**Where:** 18600 Wedge Pkwy., Reno  
 TMCC High Tech Ctr  
 Redfield Campus, Room 103  
**Time:** 1:00 p.m. to 4:00 p.m.

**Video Teleconference Locations will be made available. Locations listed on attachment. Contact us if you are interested in a specific location.**

**RSVP is essential - [jenifer.taylor@nv.usda.gov](mailto:jenifer.taylor@nv.usda.gov)**

USDA Rural Development  
 COMMITMENT to the future of rural communities  
 USA IS AN EQUAL OPPORTUNITY EMPLOYER AND LENDER

Nevada CONNECT

Sarah Adler | State Director    USDA Rural Development

Lindsey Niedzielski                    State Program Manager  
Connect Nevada

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Watch this music video featuring Hoop Dancer Nakotah Larence! <http://www.powwows.com/2013/12/06/music-video-featuring-hoop-dancer-nakotah-larence-pow-wow-video-of-the-week/>

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Loika Kane shared Lastrealindians's photo.

This is Murrica for you. Boy do they have a misconception about what goes on on our reservations. Our reservations have the warmth of family, of home, of community. These guys are just haters and haters are losers, plain and simple. Ignorant, pathetic losers! Apology not accepted - thank you!



From a sonic restaurant somewhere in 'mmurrica. One thing we're tired of is these ignorant jackasses offending us then apologizing. We need to start flexing with our buying & boycotting too.

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