

National Weather Service - Elko The Great Basin Spotter Newsletter



Constituents Meeting	1
Earth Day 2006	1
Climate Summary	2
Diamond Valley Tornado	2
RADAR Road Improved	3
Storm Ready	4
Lightning Safety Week	5
Seasonal Outlook	6
Hydrology	7
Boy Scout Visit	8

Constituents Meeting Great Success!

By Jeff Savadel



Photo Courtesy John Senn

Forecast Centers across the Nation held constituent meetings to try to identify areas of opportunity to improve our services. WFO Elko held a Constituent Meeting/Open House on Monday May 8 with guests including the media, a county commissioner, a county manager and an aide to Congressman Jim Gibbons. Of note was favorable feedback received regarding direct interactions between NWS staff and other partners, such as weather briefings given at the Multi-Agency Coordination meetings last summer during significant wildfires. An office tour was given to the attendees after the meeting, including the launch of a weather balloon.

Elko Forecast Office Participant in Earth Day 2006

By Randy Settje Meteorologist



Rick Arkell gives a presentation on severe weather safety during Earth Day 2006

Rick Arkell (lead forecaster) and **Delyne Kirkham** (Administrative Assistant) represented the Elko Forecast Office at Earth Day 2006, which was sponsored by the Te-Moak Tribe of Western Elko Band Council. Rick and Delyne talked to the public about safety issues during severe weather events in northern Nevada. They focused on the dangers of lightning, high winds, and flooding. They also showed some of the equipment National Weather Service uses to get weather data.

Earth Day and Every day is a time to act to protect our planet.



Winter/Spring 05/06 Climate Summary for Northern and Central Nevada

By Cliff Collins (Senior Meteorologist)

Northern Nevada experienced its second wet winter and spring in a row this year while central Nevada was near to a little below normal after a wet winter and spring the year before. For the water year to date (October 1st thru May 31st) Elko had received 12.93 inches of precipitation which ranks as the 2nd wettest on record. Winnemucca picked up 10.53 inches which ranks as the 4th wettest on record. Central Nevada was near to a little below normal with Ely receiving 7.13 inches of precipitation since October 1st which was slightly above the normal amount of 6.86 inches. Tonopah picked up 3.08 inches which was below the normal amount of 3.89 inches. Temperature wise the winter of 2006 was rather mild with all stations reporting above normal temperatures. Elko was 2.9 degrees above normal which ranked as the 17th warmest winter on record. Ely was 1.7 degrees above normal and Winnemucca 1.2 degrees above normal which ranked as the 22nd and 33rd warmest on record respectively. For the Spring however only Elko came in with above normal temperatures with a mean temperature about 1 degree above normal. In contrast Winnemucca was 1.3 degrees below normal and Ely was near normal.



Rope-Like Tornado in Diamond Valley

On June 9th a very strong Thunderstorm crossing Diamond Valley near Eureka spawned this rope-like tornado. No damage was reported with this tornado.

Although tornadoes are rare in Nevada, they do occur. The Silver State ranks 44th out of all 50 states with only one touchdown incident recorded in an average year. (Texas ranks first with an average of 123 confirmed tornadoes every year.) Between 1947 and 1973 in Nevada and the Sierra, 13 confirmed touchdowns were recorded with 33 confirmed funnel clouds (potential tornadoes not making contact with the

June 9th Tornado in Diamond Valley near Eureka, Nevada.

Photo Courtesy of Cheryl Morrison from Sheriff's Office in Eureka

Dangerous Road to RADAR Site Improved

NWS Elko's Doppler Weather Radar

The National Weather Service forecast office in Elko operates a Doppler Radar (WSR-88D) to track storms of all varieties as they pass through northern Nevada. The radar is located on Sheep Creek Mountain, north of Battle Mountain (pictured to the right) and is picked because it is central in our forecast area and gives us the widest coverage possible. One of the biggest problems is getting to the RADAR site during winter. The Electronic Technicians (ETs) use a combination of Snow Mobiles, ATVs, and Snow Cats, depending on the conditions. Each Spring, the snow melt flows down the RADAR road making it an exciting and dangerous trek to the top of Sheep Creek Mountain. This Spring was no exception and once again the road became a stream bed and was only passable using the Snow Cat. Thanks to Grant Garner, that has changed. He rebuild and graded the road this Spring so that the ETs can use their truck to reach the site. ESA Herb Loell stated that "thanks to Grant's superb efforts, the trip to the RADAR is now 2 hours faster than before. It is also much safer!"



Long and winding road to RADAR site.
Photo Courtesy Roham



Winter travel is always a challenge.
Photo Courtesy Roham



Snow Cat travel: slow but reliable.
Photo Courtesy Roham



Pictures taken from the Snow Cat before the Road was improved. Water was gushing down and eroding the road in many areas making a harrowing trip to the RADAR site in the Snow Cat.
Photo Courtesy Herb Loell



Road after Grant Garner's improvements. Note: this picture was taken from the ET truck!
Photo Courtesy Herb Loell



*When Seconds Count, StormReady
Communities are Prepared*

Northern Nevada's First **StormReady** Community

By Jeffrey Savadel WCM

Duck Valley Indian Reservation

Americans live in the most severe weather-prone country on Earth. Each year, Americans cope with an average of 10,000 thunderstorms, 2,500 floods, 1,000 tornadoes, as well as an average of 6 deadly hurricanes. Potentially deadly weather impacts every American. Communities can now rely on the National Weather Service's **StormReady**® program to help them guard against the ravages of Mother Nature.

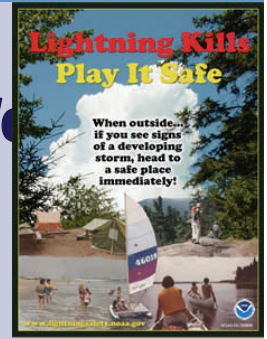
The National Weather Service (NWS) office in Elko recognized the **Duck Valley Indian Reservation** in northern Nevada and southern Idaho as its first **StormReady** community on April 28, 2006. A formal recognition ceremony is planned on July 11. To be declared **StormReady**, communities or counties must apply through the local forecast office and meet certain requirements. These requirements include having the ability to receive warnings, disseminate them to the public and take proper safety steps. Additionally, weather safety presentations must be given by the NWS to the community every year. These communities are better prepared to deal with extreme weather and even non-weather hazardous events, ultimately helping protect citizens. More information on the **StormReady** program can be found at: <http://www.stormready.noaa.gov/>



Lightning Safety Awareness Week

(June 18-24 2006)

by Jeff Savadel



Summer is the peak season for one of the nation's deadliest weather phenomena— lightning. In the United States, an average of 67 people are killed each year by lightning. That's more than the annual number of people killed by tornadoes or hurricanes. **In 2004, there were 32 deaths attributed to lightning, down from 44 thanks in part to increased education and safety. In 2005, as of October 6, there were 33 deaths.** Unfortunately, many more people are struck but survive with a variety of long-term, debilitating symptoms, including memory loss, attention deficits, sleep disorders, numbness, dizziness, stiffness in joints, irritability, fatigue, weakness, muscle spasms, and depression.

When Thunder Roars, Go Indoors!

No place is absolutely safe from lightning; however, some places are much safer than others. The **SAFEST** location during lightning activity is a large enclosed building, not a picnic shelter or shed. The second safest location is an enclosed metal vehicle, car, truck, van, etc., but **NOT** a convertible, bike or other topless or soft top vehicle.

When a Safe Location is Nearby:

- **Seek safe shelter when you first hear thunder, see dark threatening clouds developing overhead or lightning.**
- **Stay inside until 30 minutes after you last hear thunder.**

Outdoor Sports Activities

The safest locations are the **vehicles** the kids came in or the **rest rooms**.

It is important **NOT to stay in the dugouts** as they are not safe place during lightning activity.

Family at the Beach

The best place to go is your **car**.

Do NOT seek shelter under the beach **picnic shacks** because these are not safe in lightning storms.

When a Safe Location Is Not Nearby:

The lightning safety community reminds you that there is **NO** safe place to be outside in a thunderstorm. If you **absolutely can't get to safety**, this section is designed to help you lessen the threat of being struck by lightning while outside. **Don't kid yourself--you are NOT safe outside.**

- **Do NOT seek shelter under tall isolated trees!** The tree may help you stay dry but will significantly increase your risk of being struck by lightning.
- **Do NOT seek shelter under partially enclosed buildings**
- **Stay away from tall, isolated objects.** Lightning typically strikes the tallest object in an open field or clearing.
- **Do not place your campsite in an open field on the top of a hill or on a ridge top.**
- **Stay away from metal objects, such as fences, poles and backpacks.**

IMPORTANT: These recommendations are a last resort. You are **NOT** safe in these places just marginally safer than in the open.

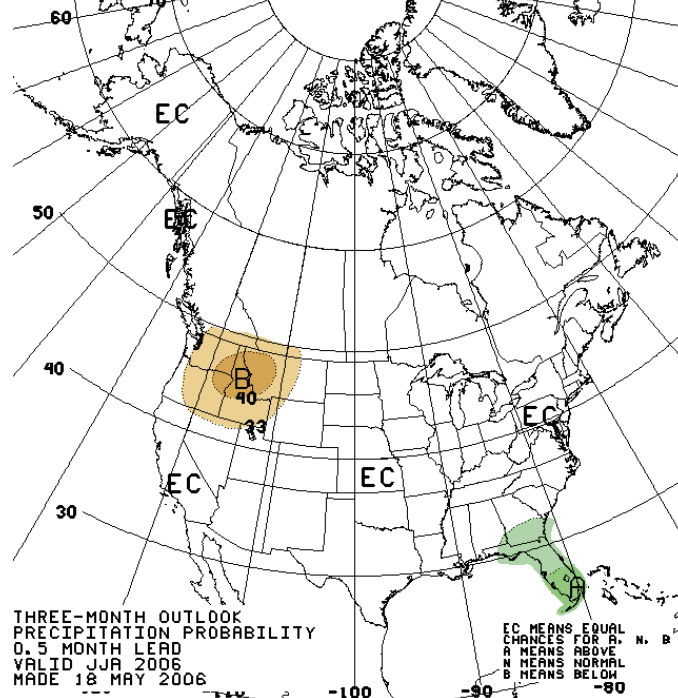
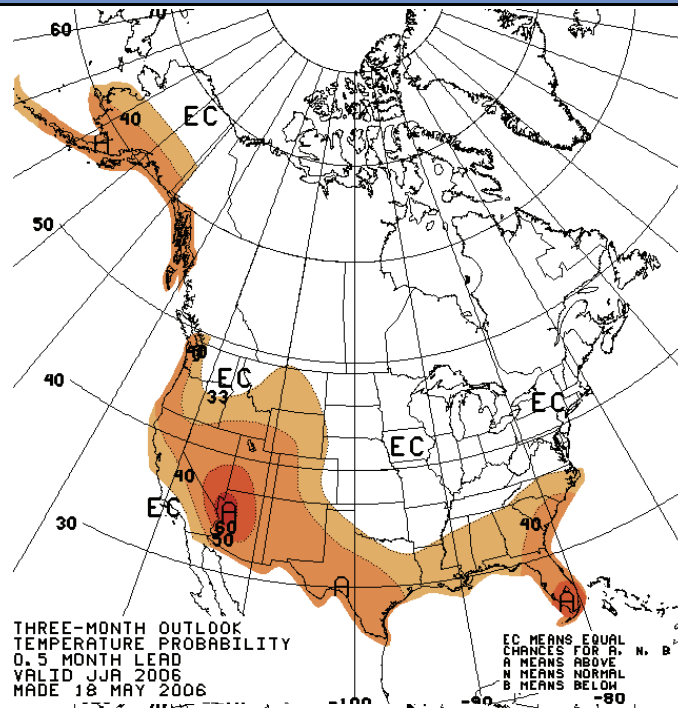
On the Water:

The vast majority of lightning injuries and deaths on boats occur on **small boats with NO cabin**. It is crucial to listen to the weather on a small aquatic vessel without a cabin. If thunderstorms are forecast, don't go out. If you are out on the water and skies are threatening, get back to land and find a safe building or vehicle. What should you do if you are on a small vessel and lightning becomes a threat? If the vessel has an anchor, then you should properly anchor the boat then get as low as possible.

Seasonal Outlooks

OFFICIAL Forecasts NWS Climate Prediction Center

JUN/JUL/AUG 2006



Water Over The Dam

By Larry Whitworth

WILDHORSE RESERVOIR REACHES SPILLWAY

Springtime always brings an onslaught of snowmelt from the higher mountains of northern Nevada. And, like the weather, river and stream flows differ from one year to the next as well. With the abundant water supply this year, Wildhorse Reservoir filled to capacity.

Last year, a five-year drought was declared over for Northern and Central Nevada and spring flooding was widespread, beginning in May. In 2006, spring flooding began nearly a month earlier than the previous year. Flooding along the Humboldt River began by early April due to significant precipitation that fell across the area with rapid runoff, while many smaller rivers and streams ultimately feeding into the Humboldt maintained within their banks due in part to mild daytime and overnight temperatures. By late April, snow-melt from higher elevations then caused rises along the smaller waterways that led to bank overflow, however the crest of water running along the Humboldt River continued to make its way westward towards Lander and Humboldt Counties.

Water began flowing over the spillway at Wildhorse Reservoir on April 17th, at level not seen since 1999. As snowmelt began accelerating into the creeks feeding into the Owyhee River upstream of Wildhorse Dam, the level continued to rise slowly through April 25th and attention was drawn to areas downstream of the dam, where flood risk would be maximized. The Owyhee River at Mountain City reached flood stage on April 23rd just prior to a crest of 6207.2 feet at the Wildhorse Dam. The reservoir level has receded slowly since late April, however there will be heightened awareness for businesses and residents along the Owyhee River through early June.



Elko Boy Scouts Visit Forecast Office



For those of you interested in seeing our facility, feel free to give us a call and we can schedule a tour. We can show you the weather balloon launch in the afternoon or demonstrate how we forecast the weather. For more information, contact our **Warning Coordination Meteorologist (Jeff Savadel)** at **775-778-6716**.

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