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## Going "Strong" After 127 Years of Observations



**William Strong II** releases a weather balloon at the Brookhaven National Laboratory In New York. His wife, **Robin**, in back, and son, **William III**, look on. Inset at top right, **Selah Brewster Strong**, who founded the site.

For 127 years, the Strong family of Setauket, NY, has collected climate data for the National Weather Service (NWS). This remarkable and civic minded feat was recognized at a ceremony at the local forecast office in Upton, NY.

Representing four generations of Strongs was the current Cooperative Weather Observer, **William Strong II**. William was accompanied by his wife, **Robin**, and his son, **William Strong III**.

The family Heritage award is reserved for families who have dedicated a century or more to the nation's welfare. The unbroken record of climatological readings

for Setauket was started by William Strong's great grandfather, Judge **Selah Brewster Strong** in 1885, who kept the record until December 1931.

"Toting a pail and a mercury thermometer, Selah set out to record weather data on a small peninsula in Port Jefferson Harbor in 1885 and began a tradition his family continues," according to an article in Newsday.com.

Selah eventually passed the torch, or bucket in this case, to his daughter, **Kate W. Strong**. Kate began helping her father with observations when she was 12 years old and continued until she was well into her 90s. Her nephew, **William Y. Strong**, the current

*"They've monitored the weather through some doozies: The Great Hurricane of 1938 —often referred to as the Long Island Express — Hurricanes Bob and Gloria, and Tropical Storm Irene"*

Observer's father, succeeded her in October 1960, and upon his death in August 1983, **Sylvia C. Strong**, his widow, continued the family tradition in his memory.

"They've monitored the weather through some doozies: The Great Hurricane of 1938 —often referred to as the Long Island Express —Hurricanes Bob and Gloria, and Tropical Storm Irene," said Newsday.com

William, the current Observer, took over after his mother's death in 1998. This commitment to climate history and service is a remarkable achievement. The NWS and the climate community salute four generations of dedicated Coop Observers with this award.

NWS New York Meteorologist-In-Charge (MIC) **I. Ross Dickman**, and Observation Program Leader (OPL) **Tim Morrin**, welcomed the Strongs to the NWS Upton office. Eastern Region Cooperative Program Manager (CPM) **Kevin Murray** also joined the festivities, which

included an office tour, special balloon launch and light refreshments. Electronic and print media also attended the event.

The Strongs commented, "We were overwhelmed by the hospitality! It was great to get the overview from Ross, have a look around the office and meet some of the staff, release the weather balloon, receive the award and join you for lunch.

"We will fondly remember our visit for quite some time to come and the award has found a place of honor in our living room. Again, thank you for making it such a memorable day for our family. Looking forward to seeing everyone again in another 25 years!"

The Newsday article asked William if his family will continue their legacy. He said he is trying to spur interest in weather in his son William III. William, age 19, said, "I don't think I would want it to end here!" ✨

## History of the National Weather Service

The NWS has its beginnings in the early history of the United States. Weather has always been important to the citizenry of this country especially during the 17<sup>th</sup> and 18<sup>th</sup> centuries.

The beginning of the NWS as we know it today started on February 9, 1870, when President Ulysses S. Grant signed a joint resolution of Congress authorizing the Secretary of War to establish a national weather service.

This official resolution required the Secretary of War, "to provide for taking meteorological observations at the military stations in the interior of the continent and at other points in the States and Territories... and for giving notice on the northern Great Lakes and on the seacoast by magnetic telegraph and marine signals of the approach and force of storms"

After much thought and consideration, it was decided that this agency would be placed under the Secretary of War because military discipline would probably secure the greatest promptness, regularity and accuracy in the required observations.

Within the Department of War, it was assigned to the Signal Service Corps under Brigadier General Albert J. Myer. General Meyer gave the NWS its first name: The Division of Telegrams and Reports for the Benefit of Commerce.

Later that year, the first systematized, synchronous weather observations ever taken in the U.S. were made by "observing-sergeants" of the Army Signal Service at 22 stations and telegraphed to Washington. An agency was born that would affect the daily lives of most of the citizens of the United States through its forecasts and warnings. ✨



Ulysses S. Grant

## Evolution to the Signal Service Years: 1600-1891

The early settlers to North America experienced the harshness of the weather of the New World. Samuel de Champlain, in the early 1600s told much about the weather of the northeast United States when he stated:

"It was difficult to know this country without having wintered there; for on arriving in summer everything is very pleasant on account of the woods, the beautiful landscapes, and the fishing for the many kinds of fish found there. There are 6 months of winter in that country. The cold was severe and more extreme than in France and lasted much longer."

Samuel de Champlain's sentiments were echoed in 1600 by Governor William Bradford of Cape Cod, who stated the winters to be, "...Sharp and violent, and subject to cruel and fierce storms, dangerous to travel to known places, and much more to search an unknown coast."

Weather was vital to many of the Founding Fathers who reflected that importance by being also avid weather Observers. Thomas Jefferson bought his first thermometer while writing the Declaration of Independence and purchased his first barometer a few days after signing the document. Incidentally, he noted that the high temperature in Philadelphia, on July 4, 1776, was 76 degrees. Jefferson made regular observations at Monticello from 1772-78, and took the first known simultaneous weather observations in America. George Washington also took regular observations; the last weather entry in his diary was made the day before he died.

In the early 1800s, weather observation networks began to expand across the country. Although most basic meteorological instruments had existed for more than 100 years, the telegraph was largely responsible for advancing meteorology in the 19<sup>th</sup> century. With the advent of the telegraph,

observations from distant points could be rapidly collected, plotted and analyzed.

When the telegraph became operational in 1845, visionaries saw the possibility of forecasting storms by telegraphing what was coming. Joseph Henry, Secretary of the new Smithsonian Institution, envisioned opportunities of the communication system and proposed, "...a system of observation which shall extend as far as possible over the North American continent... The citizens of the United States are now scattered over every part of the southern and western portions of North America, and the extended lines of the telegraph will furnish a ready means of warning the more northern and eastern Observers to be on the watch for the first appearance of an advancing storm."



*Tornado Over Land: "Histoire des Meteoires", J. Rambosson, 1869. Figure 48, p. 209. NWS Collection: Image Date: 1869*

The plan was approved in 1848, and subsequently, a circular was sent to the press to recruit volunteer Observers. Henry also persuaded the telegraph companies to allot free time for the transmission of weather reports to the Smithsonian.

By late 1849, 150 volunteers were reporting weather observations to the Smithsonian regularly. By 1860, 500 of Henry's stations were furnishing daily telegraphic reports to the *Washington Evening Star*. As Henry's volunteer network grew, other systems were absorbed, including several state weather services.

The ability to observe and display weather data, through the use of the telegraph, quickly led to the next logical advancement, forecasting of weather; however, the ability to observe and forecast weather over much of the country, required considerable structure and organization—a government agency.

More NWS history in the summer edition of the National Cooperative Observer. ☼

*"There are 6 months of winter in that country. The cold was severe and more extreme than in France and lasted much longer." Samuel de Champlain*

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## Thomas Jefferson Award



Jefferson Award Winner **Don Olson** and wife **Marie** show their prestigious Thomas Jefferson Awards, the highest honor presented to NWS Cooperative Observers

Coop Observer **Don Olson** of Montpelier, ND, was presented the Thomas Jefferson Award and a 40 Year Length of Service Award at NWS Bismarck, ND. The awards and pin were presented by NWS Bismarck CPM, **Sandra Wiche** and MIC **Jeff Savadel**.

In attendance were Don's wife, **Marie**, their children **Brad**, **Karen**, **Marcy** and **Brett**, and their children's families. Don has been the Observer for Montpelier since November 1, 1971. His data are consistently among the most timely, accurate and legible. Don's observations are never missing, even under the most adverse weather conditions North Dakota throws his way. Among those who use Don's observations are the school district, media, local agricultural concerns and downstream residents on North Dakota's James River.

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## Thomas Jefferson Award



From left, MIC **Keith Meier**, NWS Billings, MT; Jefferson Award recipient **Alex Collie**; and **Dave Brandon**, Chief, Hydrology and Climate Services Division, Western Region Headquarters, Salt Lake City. Photo by OPL **Carolyn Willis**, NWS Billings.

**Alex G. Collie** of MacKenzie, MT, was recognized for exceptional weather observing of more than 60 years by receiving a Thomas Jefferson Award, the highest Cooperative Observer Award. The ceremony took place at PC's Cedar Creek Café in Baker, MT, and was attended by Alex's friends and family from across eastern Montana.

Alex began reporting daily precipitation readings on his ranch in southwest Fallon County, MT, in June 1950. The ranch was originally homesteaded in 1910 by his mother. At 83 years old, Alex continues to work on the ranch raising Black Angus cattle. Alex's son, **Alex Jr.**, assists with observations on occasion, but Alex Sr. plans to maintain the observations as long as he can.

Alex has been honored with numerous NWS awards for his efforts in the Cooperative Weather Observer Program. The Thomas Jefferson Award was the 5<sup>th</sup> national award presented to him. Alex has also been awarded the Edward H. Stoll award, the John Campanius Holm Award, the Benjamin Franklin Award, and, most recently, the Helmut E. Landsberg Award in 2010 for 60 years of service. Alex has been a weather Observer longer than anyone currently in the Cooperative Observing Program in the state of Montana.

## John Campanius Holm Awards

**Bill Kinsland** of White County, GA, was presented with the John Campanius Holm Award for excellence in weather observing. He also received a 20 Year Length of Service Award. Presenting the awards is the NWS Peachtree City, GA, MIC **Lans Rothfusz**. The award was presented during the monthly city council meeting. Also attending were Bill's family, and OPL **George Wetzel**.



From left are Commissioner Terry Goodger, MIC **Lans Rothfusz**, Holm Recipient **Bill Kinsland**, and Commissioners Travis Turner, Edwin Nix, Lyn Holcomb and Craig Bryant. Photo by Billy Chism.



From left, son, **Justin Petty**; wife, **Vicki Petty**; Holm Recipient **Tom Petty**; grandson **Jacob Petty**; and MIC **John Livingston**.

**Tom Petty** of Asotin, WA, received the Holm Award in recognition of 35 years of outstanding service in the Coop Program. **Susan Nelson**, NWS Western Region OPL said, "Modern technological breakthroughs have greatly benefited the Nation in terms of better forecasts and warnings. But without long term, accurate weather observations taken by volunteer Observers, scientists could not begin to adequately describe the U.S. climate. We can't thank Mr. Petty enough for his years of service to America."

The award was presented at a luncheon attended by family, friends, and Asotin County officials. Tom initially reported significant event precipitation to the Washington State Soil Conservation Service. He was invited to become a Coop Observer and agreed to provide critical precipitation information for the Asotin Creek drainage.

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## 100 Year Honored Institution Award



From left, NWS Detroit, MI, OPL **Deb Elliott**, Mayor **Henry Hornung**, **Vassar, MI, Waste Water Treatment Plant** Superintendent **Carl Miller**, and MIC **Richard Wagenmaker**.

In February 1910, the NWS, then called the Weather Bureau, installed a chain-weight river gage on the state highway bridge crossing the Cass River in Vassar, MI. On February 15 of that year, the Vassar city government was recruited to provide readings of that gauge, marking the beginning of Vassar's long established role as part of Coop Network. The reading of the river gauge coincided with the Weather Bureau's nationwide River and Flood Divisions assessment of available water for irrigation and also its new generalized weekly forecasts for agricultural planning.

Since Vassar's inception into the network, other instruments were added and duties expanded to include temperature and precipitation reports. With the exception of the temporary removal of the river gauge in 1938 in order to rebuild the bridge, service from Vassar has been consistent and has provided support to the Weather Service for more than 100 years!

Looking through the flood history of the city, it seems the Observers at Vassar have certainly earned their keep: The Cass River in Vassar frequently overflowed its banks. Most recently, the great flood of 1986 took its toll on this area. During 1986, the flood waters rose more than 10 feet above flood stage and made the history books as the greatest flood ever to hit the area. That dubious honor previously was held by the flood of 1948, when the river crested at 20.8 feet, about 7 feet above flood stage. Though a lesser flood with a crest of just under 3 feet, the 1938 flood was sufficient enough to take out the M-15 bridge.

## 100 and 50 Year Honored Institution Awards



Pictured are **Priest River Experimental Forest Supervisor Bob Denner** and NWS Spokane MIC **John Livingston**.

The **Priest River Experimental Forest (PREF)** was among the first experimental forests, set aside as a forestry research center in September 1911. One of the first projects undertaken at the site was the establishment of an official weather station.

The NWS marked this Century of Science with the presentation of a 100 year Honored Institution Award at a celebration held at PREF. In addition to daily cooperative weather reports, PREF staff members have recorded snow pack data from 1937 to present, hydrology in the Benton Creek watershed since 1955, and atmospheric chemistry since 2002.

Other research at PREF produces information on basic forestry principles still used today for managing Rocky Mountain forests. Throughout the forest's history, it has been a key location for conducting forestry research. Regeneration studies using shelterwood, seedtree, and clearcut methods have provided

information for regenerating mixed conifer forests. Site preparation, planting, cleaning, weeding, and thinning studies have provided information on how to regenerate and maintain forest stand composition and growth.

Another important area of research by PREF staff includes fire research. This research began with the development of the first fire danger rating system. This research was followed by studies on fire behavior, fuel inflammability, and fire effects. Forest growth and yield has been studied at the PREF since 1914. The results led to the development of growth and yield models.

The **U.S. Army Corps of Engineers, East Brimfield Lake, MA** receives an Honored Institution Award for 50 years of service. Receiving this award are Park Rangers **Pat Tetreault**, left, and **Keith Beecher**. The award was presented by CPM **Kimberly Buttrick** NWS Taunton, MA





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## 50 Year Edward R. Stoll Awards



The **Anderson Family** of Melville, MT, received the Edward H. Stoll Award for 50 years of outstanding service in the Cooperative Observer Program. **Thorvald E. Anderson** began taking observations at his ranch west of Melville in April 1960. Thorvald's son, **Perry**, grew up assisting his father with the observations, and took over as the official Observer when his father passed away in 2001. Perry is now assisted by his son, **Nathan**, carrying on the Anderson family tradition.

From right, Stoll Award Recipient **Perry Anderson**, Perry's wife **Annie Anderson**, and NWS Billings, MT, MIC **Keith Meier**.  
Photo by OPL **Carolyn Willis**.

After a private lunch just outside of Montezuma, GA, **George Fowler** was presented with the Edward H. Stoll Award for 50 years of dedicated service as a Cooperative Observer. George has no plans to retire anytime soon and the NWS welcomes his continued and long time service.

Presenting the award is the NWS Peachtree City, GA, OPL **George Wetzel**. Photo taken by NWS Meteorologist **Robert Garcia**.



## 50 Year Edward R. Stoll Awards



**Eugene Cronrath**,  
Cooperative Observer  
at Harrington, WA, left,  
accepts the Edward H.  
Stoll Award for 50 years  
of service. The award  
was presented by MIC  
**John Livingston**, NWS  
Spokane, WA.

**Emmie Rusche** of Prairie  
Mountain, TX, was presented  
posthumously with the  
Edward Stoll Award for  
50 years of service.  
Pictured are her daughter,  
**Sue Reeves**, and Sue's  
husband **James**.  
The award was given by  
**Patrick McDonald**, NWS  
Austin/San Antonio, TX



## 45 Year Dick Hagemeyer Service Award 35 Year Length of Service Awards



**Lendall Stowers** of Retrop, OK, was presented with a 45 Year Length of Service Award. Presenting the award and taking the photo was OPL **Forrest Mitchell**, NWS Norman, OK.



**Anna Belle Walker** of Pep, TX, receives a 35 Year Award from MIC **Justin Weaver**, NWS Lubbock, TX, and Senior Service Hydrologist (SH) **John Lipe**. Photo by OPL **Mike Turner**.

Historic Pep is an offshoot of the Yellow House portion of the 3,050,000 acre IXT ranch, founded in 1924 by German-Americans, who wanted to start a German Catholic Colony. Pep, famed for its annual Thanksgiving festival, swells from a population of 22 to upwards of 1,500 for the annual dinner. Part of the Llano Estacado region of Texas, the name Pep was chosen in 1936 as an admired characteristic of its residents. Anna Belle, a lifelong resident, is one of only 6 females residing in the area and of two people living in Pep proper. Anna Belle's large family lives nearby. The Pep Coop site has been in operation since 1941. Anna Belle's pioneering parents were among the first residents of this tiny West Texas town. Anna Belle served as a Post Master from May 1977 until her retirement in 2000.



**Edward Capone**, center, receives a 35 year Length of Service Award for weather observing from his home in Norton, MA. Ed is a Service Coordination Hydrologist (SCH) with the Northeast River Forecast Center, which is co-located with NWS Taunton, MA. For this award, Ed was recognized by his peers: from left, Science and Operations Officer (SOO) **Joseph Dellicarpini**, Hydrologist-in-Charge **David Vallee**, OPL **Alan Dunham**, and MIC **Robert M. Thompson**. Photo by CPM **Kimberly Buttrick**.

## 30 and 25 Year Length of Service Awards



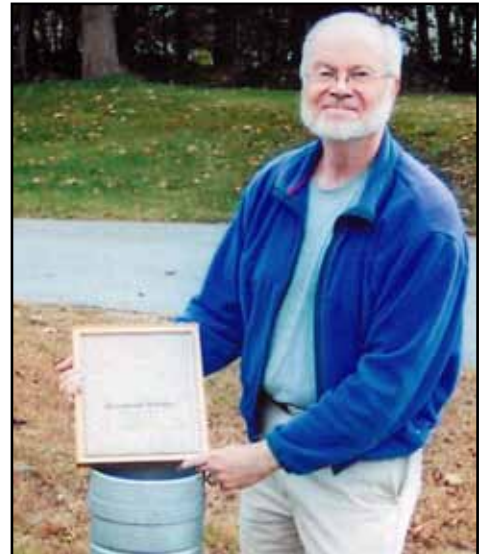
From left, **Larry McMasters**, of Lovelock, NV, accepts a 30 Year Length of Service Award and service pin. Larry's station began reporting on January 1, 1895, and is a Historical Climate Network Station. The award was presented by OPL **Scott McGuire**, NWS WFO Reno, NV.  
Photo by SOO **David Myrick**.



**Ted Norcross** of Robbinsville, NC, was presented a 30 Year Length of Service Award by Meteorologist **Chris Horne**, NWS Greenville-Spartanburg, SC. Ted's weather station in the Stecoah Valley was formerly a NC State University Agricultural Weather Station. Ted is the owner and operator of the 7.5 inch backyard Stecoah Valley Central Railroad.



**Carole Gutierrez** accepts her 25 Year Award for Hudson, MI, from OPL **Deb Elliott**, NWS Detroit, MI. Carole's station dates back to 1965. Precipitation readings from this station support River Forecast Centers in both Minnesota and Ohio for Michigan's River Raisin and Ohio's Maumee River as well as the St. Joseph River in Michigan and Indiana. Carole is retiring. We thank her for her dedication and many years of quality service.



**Raymond Whitley** of Newburyport, MA, receives a 25 Year Length of Service Award. Weather records from Newburyport date back to 1931. Thank you to Ray for continuing the tradition! Photo by CPM **Kimberly Buttrick**, NWS Taunton, MA.

## 25 Year Length Honored Institution Awards 20 and 15 Year Length of Service Awards



Observer **Gerald Fitch** was presented a 25 Year Length of Service Award for precipitation readings near Argonia, KS. Presenting the award was OPL **Leon Wasinger**, NWS Wichita, KS.



A 25 Year Honored Institution Award was presented to the **Fraser, CO, Visitor Center**. From left are **John Hartlauer**, Public Works; **Dale Booth**, Station Manager; NWS Boulder Meteorologist **Jim Kalina**; **Ryan Turk**, Public Works; and **Bret Howcroft**, Public Works.



**James Rozell** of Lake Kemp, TX, was presented with a 20 Year Length of Service Award by OPL **Forrest Mitchell**, NWS Norman, OK.

**Carol Linden** of Lebo, KS, was presented with a 20 Year Length of Service Award for her high quality precipitation and snowfall measurements. As a weather enthusiast, Carol also has been a great severe storm spotter. The award was presented by OPL **Michael Couch**, NWS Topeka KS.



**James Blomgren**, of Grand Meadow, MN, shows his 15 Year Service Award presented by Hydrometeorological Technician (HMT) **Tom Stangeland**, NWS La Crosse, WI. James works for the **Mower County Road District** and is also a trained spotter. He has the NWS on speed dial so as he travels the south central Minnesota roads he can report weather phenomena in real time.

## 15 Year Length of Service Awards



**Cliff Lyons** of Anadarko, OK, shows his 15 Year Length of Service Award presented by OPL **Forrest Mitchell**, NWS Norman, OK.



From left, **Buzz Merchlewitz**, Observer for Somerville, TN, accepts a 15 Year Length of Service Award from MIC **Jim Belles**, NWS Memphis, TN. Buzz, a former Service Hydrologist at NWS Memphis, collects precipitation data for his area in a rain gauge, stamped USWB, for U.S. Weather Bureau, NWS predecessor. In addition to weather history, Buzz loves his antique automobile. He still holds the record lap time for a special class of vintage cars at the Talladega, AL, Race Track. Photo by DAPM **Zwemer Ingram**



**Gene Pacia**, Observer for Youngstown, NY, was presented with a 15 Year Length of Service Award by NWS Buffalo Intern **Chris Fisher** and OPL **Dan Kelly**.



**Marvin and Eudora Petersen** hold their 15 Years Length of Service Award. Since 1997, Marvin and Eudora have been providing quality temperature, precipitation and snowfall data from their home in Concordia, KS. The award was presented by OPL **Michael Couch**, NWS Topeka, KS.



**Robert Richards**, Coop Observer for Stanley, WI, shows his 15 Year Length of Service Award presented by OPL **Michelle Margraf**, NWS Chanhassen, MN. Robert is retiring and will be missed.

## 10 Year Length of Service Awards



**Johnny Branam** of Hobart, OK, shows his 10 year Length of Service Award presented by OPL **Forrest Mitchell**, NWS Norman, OK.



Observer **Scott Cultice** and trusted companion, **Sophie**, were presented a 10 Year Length of Service Award for precipitation and temperature readings at Appleton, WI. Photo by OPL **Pat Hein**, NWS Green Bay WI.



**Sandra J. Deneen** of rural Spring Grove, MN, was presented a 10 Year Service Award by HMT Brad Adams, NWS La Crosse, WI. The upgraded FPR-D gauge was also installed that day, meaning no more frozen fingers after changing a punch tape!



**Angelo Felix** of Nahunta, GA, gets help holding his 10 Year Length of Service Award from his grandsons, **Travis**, left, and **Willie**. Angelo is a top notch Observer. Prior to retiring to the Nahunta area, Angelo was a firefighter and Observer in Puerto Rico. The award was presented by OPL **Mike McAllister**, NWS Jacksonville, FL.



**Shannon Grubb** of Carta Valley, TX, was presented with a 10 Year Length of Service Award by OPL **Pat McDonald**, NWS Austin/Antonio, TX.



**Ron Hoff** of Scotland, TX, gets help showing his 10 Year Length of Service Award from **Lenora Hoff** and grandson **Bryson**. Photo and presentation by OPL **Forrest Mitchell** NWS Norman, OK.

## 10 Year Length of Service Awards



**Stan Kapler**, of Minden, NV, accepts a 10 Year Length of Service Award and service pin. Stan's station began reporting on June 1906. The award was presented by OPL **Scott McGuire**, NWS Reno, NV.



**Fintan P. Moore, Jr.**, of Keene, NH, holds his 10 Year Length of Service Award. Keene is part of our nation's Historical Climate Network with more than 100 years of data. Keene's weather records date back to 1892. Photo by CPM **Kimberly Buttrick**, NWS Taunton, MA,



**Wayne Ralph**, Observer for Covington, TN, accepts his 10 Year Length of Service Award from MIC **Jim Belles**, NWS Memphis TN. Wayne takes very accurate and timely observations. In addition to weather, Wayne counts Bee-Keeping and antique collecting among his hobbies. It's always fun to visit and look at the antique John Deere tractors he has carefully restored. Photo by DAPM **Zwemer Ingram**.



Observer **Eric Stites** holds his 10 Year Length of Service Award for providing precipitation readings for Mount Hope, KS. Presenting the award was OPL **Leon Wasinger**, NWS Wichita, KS.



**Joe Wiedmeyer**, Observer at the **Saline Waste Water Treatment Plant** accepts a 10 Year Award from NWS Detroit, MI, OPL **Deb Elliott**.



**Doug Spany** of rural Steuben, WI, was presented a 10 Year Service Award by HMT **Tom Stangeland**, NWS La Crosse, WI.



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# June, July, August Temperature and Precipitation Outlooks From the Climate Prediction Center

