Welcome to the Fall season. Summer seems to just have zoomed by. It was an extraordinarily wet summer with some flooding incidents in our State Parks and Forests.

As I usually do, I used the Summer period to visit some of our on-going construction projects in the four regions and 20 Forest districts. As a onetime construction inspector, myself, I get a certain level of satisfaction seeing our design projects come alive in the construction realm. I continually remain indebted to our staff for the design and construction work.

On August 22, staff of the Bureau of Facility Design and Construction met at Little Buffalo State Park for the Bureau’s Annual Summer meeting. We use the Summer meeting to catch up on Bureau activities and create the enabling environment for staff to meet face to face and exchange ideas. The meeting went well, and we had fun.

Continued page -2-
On August 21, Heidi Kunka, Director of the Central PA USGBC (United States Green Building Council) presented Ellen Shultzabarger, State Forester, and Jason Hall, District Forester, the LEED Silver certificate earned by the Buchanan State Forest Resource Management Center (RMC). During the presentation, Heidi also announced that the RMC has been awarded the Central PA USGBC Forever Green Award for “Improving the Acceptance of Green” for 2018. This is the fourth consecutive year that FDC has been honored with this award.

On October 2, Secretary Dunn, Deputy Secretary Norbeck, a large group of FDC employees, friends and family of Marcus Snyder, attended a memorial tree planting in memory of Marcus who passed away earlier this year. A red maple was planted near Doubling Gap Lake at Colonel Denning State Park. Marcus will always be remembered for the work he did for FDC and DCNR in wetlands delineation, PNDI searches and other environmental work.

Continued page -9-
Holman Dam & Lake Improvements Complete at Little Buffalo State Park

Several rehab improvements have been recently completed at Holman Lake in Little Buffalo State Park. Located in Perry County a short 30–mile drive from Harrisburg. A park steeped in history, Little Buffalo State Park offers numerous interpretive and recreational opportunities to nearby residents as well as visitors from afar.

The primary component of the project involved design and repairs to enhance the safety of the dam’s toe drain. The toe drain is an important feature to control and collect any seepage through the embankment. The sand and gravel filter components allow water to pass through the filter medium and collect in perforated pipe before out letting to the stream channel below the dam. The filter material will filter out and prevent the migration of fine soil particles from the earthen embankment from being washed out and eroded away from the embankment. The toe drain work enhances the safety of the dam by aiding and maintaining its structural integrity. Since this work requires lowering the water elevation on the lake to facilitate construction, it is advantageous to perform other planned projects while the draw down is in place. The other items of work included dredging (removing silt) from the lake to enhance water quality and habitat for fish and other aquatic life; construction of an ADA accessible fishing pier; and the installation of a fiberglass bridge from the dam embankment to the control tower of the dam.

Since 2008 when a silt survey identified areas of excessive silt accumulation, dredging of the lake has always been a goal. Certain areas of the lake had become extremely shallow making them difficult to access by boat, kayak or canoe. The dredging project was never advanced because it would require a drawdown of the lake to perform the work. Because a draw down was necessary for the toe drain work, it was now the opportune time to move forward with the dredging. Approximately 15 acres of the 80+ acre lake were dredged resulting in the removal of approximately 41,000 cubic yards of silt. If you do the math that is estimated to be well over 2,700 triaxle dump truck loads. The, silt was disposed of at two sites within the park which saved significant costs in transportation and disposal. Removal of the silt improves water quality for fish and other aquatic life and plant species as well as improves recreational boating and fishing opportunities for the public.

Taking further advantage of the draw down, a new ADA fishing pier was constructed. The pier was designed under the Americans with Disability Act Accessibility Guidelines (ADAAG). The new structure consists of an approximate 58–foot long x 10–foot wide pier platform and an 8–foot wide x 32–foot long walkway. An ADA paved walkway from the parking area to the pier was also constructed. Able body anglers can stand and can fish from any part of the pier and change locations. To provide anglers with disabilities similar opportunities, the accessible 34-inch height railed, fishing stations were located at various points on the pier to offer a variety of locations to fish from. This provides opportunity for these anglers to fish varying water depths and conditions such as shade, sun, vegetation, etc. Park staff also installed fish enhancement structures throughout the lakebed in the area of the new pier to aid in increasing the quality of fishing.

Continued page -4-
Holman Dam

Another key component was constructing an abutment on the dam structure and placement of an 87-foot long, Fiberglass Reinforced Polymer (FRP) bridge, and two fiberglass staff gages. The gages allow for easy identification and monitoring of lake elevation levels and the bridge provides safe, all season access to the control tower for sluice gate operation used for managing the lakes water level. Previously, a boat was required to gain access to the dams control tower. This did not necessarily constitute a big problem in the spring, summer or fall when the lake was ice free. But in the winter when the lake ice thickness is unpredictable, it makes access to the tower very dangerous. The new bridge offers enhanced access and safety all year round, providing quick, efficient access to the tower.

Perhaps the biggest challenge of the project was extreme cold temperatures in the winter and above normal rainfall amounts this past spring and summer. The dredging began in the winter of 2018. Extreme cold temperatures made it difficult for transporting and dumping of the material. The wet material froze to the sides of the metal truck beds. As soon as winter broke, the heavy spring rains made it difficult to maintain the lakes draw down elevation to perform any work. The contractor was constantly battling Mother Nature, whether it was extreme cold temperatures and snow or above normal rainfall. The final stages of the dredging were completed from the end of June through early July 2018.

As with many of the Bureau of Facility Design & Construction projects, all project planning, design, coordination and construction management was performed by inhouse staff. Visitors to the park this fall will find the lake back up to its natural elevation and should enjoy these improvements for many years to come.

**Project Capsule**
- **Project Number:** FDC-317-2720
- **Project Coordinator:** Ed Raptosh, PE
- **Project Designer:** Ed Raptosh, PE, Craig Fetterhoff, PE, Ken Kozak, EIT, CBSI
- **Construction Manager:** Jim Ross P.E.
- **Construction Inspector:** Miles Filson
- **General Contractor:** Flyway Excavating, Inc.
- **Construction Cost:** $1,627,188.95

With extreme cold winter temperatures and unusually frequent rain events, the dredging work was a continuous challenge.

The new accessible fishing pier will serve and provide good fishing opportunities for park visitors for many years to come.

A new access bridge was constructed to provide maintenance personnel safe access to the dam control tower.
Kinzua Bridge Receives First Electric Vehicle (EV) Charging Station

John Dubaich, P.E.

The first official car being charged with an Electrical Vehicle (EV) charging station at Kinzua Bridge State Park

At the end of May 2018, two (2) electric vehicles (EV) charging stations were installed in the upper Bus/RV parking lot at Kinzua Bridge State Park. A pedestal accommodates the two (2) charging stations and is supported in a Sonotube concrete footer. The manufacturer of the charging stations and the pedestal is ClipperCreek, Inc. The charging stations operate at single phase 240-volts AC with a power output rating of 11.5kW (48 amps). The scope of work to individually power each EV charging station at Kinzua State Park consisted of utilizing spare slots in an existing outdoor panelboard adjacent to the project location. A 2-pole, 60-amp breaker was installed for each charging station circuit resulting in a total of two underground conduit runs originating from this outdoor panelboard and terminating at the charging station pedestal.

Kinzua Bridge State Park becomes the first DCNR facility that offers public EV charging station use. As noted in a prior BOFDAC newsletter, eight (8) non-public charging stations were installed in July 2017 at Harrisburg’s 5th Street Parking Garage adjacent to the Rachel Carson State Office Building for DCNR’s Central Office EV and Hybrid car pool vehicle fleet.

On October 5th, 2018, as part of the Fall 2018 Sustainability Tour, the EV charging stations adjacent to the Marina Boathouse at Prince Gallitzin State Park were put into service consisting of a flat paved surface offering two (2) EV spaces and a center “No Parking Zone” or access aisle. The existing 100-amp electric utility service drop to the Boathouse was increased to 200-amps and installation of a new 100-amp panelboard in the Boathouse was required in powering the EV charging stations.

Once a high-tech novelty, EV’s are becoming increasingly common and DCNR is leading the way among Commonwealth agencies to expand the opportunity for electric transportation by advancing this technology while also supporting America’s energy security and sustainability. EV’s use far less energy, produce no tailpipe emissions and have lower maintenance and fuel costs than gasoline–powered vehicles. EV’s don’t require oil changes, don’t rely on petroleum, and electricity prices are more stable than gasoline prices. Another key feature of EV’s is that they are quiet, due to lack of engine noise.

Charging stations are categorized by power level. Level 1 (L1) charging operates at single phase 120-volts AC, includes both charging station infrastructure and typical 120-volt outlets, and the amount of time to charge a fully depleted battery can take up to 12 hours equating to about 4 miles of electric range per hour of charging. The two (2) EV charging stations at Kinzua Bridge State Park are Level 2 (L2) charging. L2 chargers can operate at either 208-volt or 240-volt AC and can either be wall or pedestal/free standing post type. L2 charging time takes between 4 to 6 hours equating to about 10 to 20 miles of electric range per hour of charging depending on the EV. An even faster charging category, in which not all EV’s are able to accept, is the DC Fast Charger (DCFC) which converts AC electricity to direct current (DC) and delivers a higher rated charge resulting in a charging time of 30 minutes or less.

Continued page –6–

The Electrical Vehicle (EV) charging station at Prince Gallitzin State Park was put into service on October 5.
The future of EV charging at DCNR state parks and forest districts looks promising. The DCNR “Destination Charging Program” team consisting of John Norbeck, Michael Walsh, Alfred Uzokwe, Jarod West, Paula Devore, Peter Spadaro, and Jacob Newton has developed a list of state parks and forest Resource Management Centers (RMC) where EV charging stations would benefit EV owners the most based on many factors such as destination, visitation, key transportation routes, EV registered owners by county, etc. The list was separated into three (3) phases with each phase consisting of approximately 15 locations. The installation of EV charging stations will be occurring in the near future at Washington Crossing, Pine Grove Furnace, Codorus, Black Moshannon and Moraine, Bald Eagle, French Creek, Lackawanna, Greenwood Furnace, Cowans Gap, Hickory Run and Colonel Denning state parks.

In summary, the use of EV’s and the development of EV charging station infrastructure is on the rise due to growing consumer demand, zero-emission vehicle targets in some states, and breakthroughs in battery technology. This EV technology is environmentally friendly, reduces carbon footprint, and will promote conservation, clean energy, and transportation goals.

As the state’s leading conservation agency, DCNR strives to follow practices that conserve and sustain natural resources. Through its green and sustainable initiative, DCNR exemplifies best practices through its buildings, vehicle fleet, purchases, land management and business operations. The EV charging stations is just one of many conservation measures being utilized to support DCNR’s mission to conserve and sustain Pennsylvania’s natural resources for present and future generations’ use and enjoyment.

**Project Capsule (Kinzua Bridge State Park)**

| Project Number: | FDC–128–102557 |
| Project Coordinator: | John M. Dubaich, P.E. |
| Project Designer: | John M. Dubaich, P.E. |
| Construction Manager: | John M. Dubaich, P.E. |
| Construction Inspector: | John M. Dubaich, P.E. |
| Electrical Contractor: | A&MP Electric, Inc. |
| Construction Cost: | $8,010.00 |

**Project Capsule (Prince Gallitzin State Park)**

| Project Number: | FDC–311–102563 |
| Project Coordinator: | John M. Dubaich, P.E. |
| Project Designer: | John M. Dubaich, P.E. |
| Construction Manager: | John M. Dubaich, P.E. |
| Construction Inspector: | Jim Sowerbrower |
| Electrical Contractor: | Southern Contractors |
| Construction Cost: | $17,941.00 |
Culvert Work Complete in Delaware and Moshannon State Forests

Phil Kozak, Victor Li, P.E., James Kalp, LEED AP

DCNR has 840 bridges/culverts within its park and forestry boundaries. A number deemed “structurally deficient”. Many of these are varying size diameter of, corrugated metal pipes (CMP) that carry small streams and drainages under roadways. CMP range in various cross sections from a true round diameter for smaller pipes to what is often referred to as a “squash” pipe section in that the bottom has more of a flat section while the top maintains a radius arch for larger size pipes. The three CMP culverts on Maple Run tract neighboring the Pecks Pond in the Delaware State Forest and two CMP culverts in the PA Wilds Natural Area of the Moshannon State Forest are good examples of these. Due to their age, weather and other environmental impacts, the CMP culverts are deformed, the bottoms rusted through indicating signs of potential collapse. The obsolete culverts do not have the capacity to handle the volume of flow associated with significant rain storm events. As such they frequently clog with debris, cause flooding/erosion of the roadway and require frequent cleaning.

Although executed as two separate projects, a key design goal for both is to make sure the new structures can handle the volume of seemingly more frequent heavy rain events. Many of DCNR’s older culverts are not capable of handling the volume of modern storm events. The design resolution was to replace all five culverts with precast concrete box culverts. This involves excavation and stabilization of the subgrade, placement of precast concrete footings, placement of precast concrete culvert sections, backfill and compaction, roadway alignment and construction and placement of safety devices. The culvert faces incorporate Architectural Surface Treatment (AST) to simulate the look of natural stone. The cast stone elements are then stained to match the color of local natural stone. The bottom of the culverts is set below the stream bed channel such that a rock surface can be reestablished to simulate a natural stone creek bottom through the culverts length. This establishes a more natural, contiguous aquatic habitat the length of the structure.

Continued page –9–
Annual Summer Meeting Snapshots
August 22, 2018 Little Buffalo State Park
Directors Notes
...Continued

Finally, October 12 saw the retirement of two FDC employees. Ray Zomok was the division chief for design for the past eight years and retired after 36 years of service to the Commonwealth of Pennsylvania. His tenure included work with DEP and the former DER. Robert Shaver was a Drafter Designer for the bureau. Bob worked for DCNR and the former DER for almost thirty–two years. Good luck to them in their endeavors in retirement.

Bureau of Facility Design & Construction Director, Alfred Uzokwe, PE presents Ray Zomok, PE the traditional DCNR walking staff at his retirement luncheon

Culvert Work
...Continued

The rough terrain over remote locations within the heavily forested tracts made delivery of materials, especially the large precast concrete sections a challenge. Coordination played an important role in these projects. At the Maple Run tract, Forestry planned and executed some maintenance operations prior to the start of construction which greatly relieved the contractor’s burden in accessing the sites.

Record rainfall in Pennsylvania also created challenging obstacles for the project. At one location, excess ground water caused unstable substrate conditions, which could have resulted in foundation failure. Riprap (large stone) in conjunction with a mud mat (slurry concrete mix) was utilized to stabilize the substrate. FDC staff worked closely with the design engineer and contractor to develop a remedy plan and solved this problem in a timely manner.

The replacement of the five culverts reduces the number of DCNR’s “structurally deficient” list by five, reduces flooding risk and the manhours associated with cleaning and maintenance significantly, but most importantly provides improved facilities assuring safe passage for all travelers for many years to come.

Project Capsule (Delaware State Forest)
Project Number: FDC–019–101739
Project Coordinator: Victor Li, P.E.
Project Designer: CCJM C.C. Johnson & Malhotra, P.C. (CCJM)
Construction Manager: Victor Li, P.E.
Construction Inspector: Jason Horst
General Contractor: Grace Industries, Inc.
Construction Cost: $729,152.61

Project Capsule (Moshannon State Forest)
Project Number: FDC–009–101571
Project Coordinator: Philip Kozak
Project Designer: AECOM
Construction Manager: Gene Strick P.E.
Construction Inspector: Jack Adams, TW Consultants
General Contractor: Francis J. Palo, Inc.
Construction Cost: $446,255.00

Past and present co-workers and friends attend a retirement luncheon in honor of retiring FDC Chief, Division of Design, Ray Zomok, PE
Works in Progress
The following photographs represent some of BOFDAC’s active construction efforts throughout DCNR

FDC-011-102283 – Pinchot State Forest
Reclaim Asphalt Roads Phase I Moon Lake Tract
A roller operator compacts freshly placed reclaimed asphalt

FDC-019-100853 – Delaware State Forest
Rock Hill Scout Camp Demolition
An equipment operator demolishes the mess hall building

FDC-405-102139 – Fort Washington State Park
25kW Ground Mounted Solar Array Installation
Installation of 300-watt solar modules to racking system

FDC-131-101931 – Shikellamy State Park
Rehabilitate Kury Point
Workers placing and vibrating concrete inside formwork

FDC-210-102161 – Moraine State Park
Ground Mount Solar Array Installation at WWTP
Workers install electrical conduit
Works in Progress
The following photographs represent some of BOFDAC’s active construction efforts throughout DCNR

FDC-219-101644 – Laurel Ridge State Park
Structure Rehabilitation Laurel Highland Trail over PA Turnpike
Contractors make repairs to the safety cage frame and supports

FDC-304-1557 Colonel Denning State Park
Replace Comfort Station and Bath House
Contractor installing under slab piping systems

FDC-133-3970 – Bald Eagle State Park
Renovate Park Office and Environmental Learning Center
Sitework and building finishes continue to progress

DCS 151-1 – Caledonia State Park
Rehab Campground Restroom & Shower Houses
Interior tile and finish installation

DGS 196–11 – Tuscarora State Forest
Permanent Breach of the Gunter Valley Dam
Can you spy the six workers dismantling the control structure?

FDC-004–102579 – Linn Run State Park
Linn Road Emergency Repairs
Contractor placing derrick stone for flood damage road reconstruction
Ceremonial Groundbreaking for Long Anticipated Project

James Kalp LEED A.P.

On October 23 a groundbreaking ceremony was held at the site of the new Visitor Center for Hickory Run State Park. The park located in the western foothills of the Pocono Mountains, Kidder Township, Carbon County offers 15,990 acres of recreational wonder. Featuring the National Natural Landmark, Boulder Field, a unique physical and visual remnant from the glacial ages, three designated natural areas, over 40 miles of hiking trails, miles of trout streams, camping, environmental education programming, and an area of storied history, the park is a point of destination for old and young alike.

The visitor experience will be significantly enhanced with completion of the new 13,315 square foot Visitor Center building. The capital budget funded project administered through the Department of General Services, is an example of numerous, large scale collaborative project efforts between DGS and DCNR. DCNR, Bureau of Facility Design & Construction Section Chief, Michael J. Twigg, RA, LEED AP served as DCNR Project Coordinator. Converse Winkler Architecture LLC, Bala Cynwyd PA is the design consultant.

Local and state politicians, DGS and DCNR staff members as well as local dignitaries participated in the groundbreaking ceremony. Construction will commence immediately, and the project is anticipated for completion by the Spring of 2020. Highlights of the 6.13-acre project development include office, administration and support space, environmental education and classroom space, meeting space, public toilet rooms, expanded visitor parking including thirteen RV/bus spaces; roadway realignment work, trail connector work and extensive landscaping.

Continuing DCNR’s position of sustainability, the building is pursuing USGBC LEED Silver Certification. Sustainable features of the project include, rain gardens for onsite stormwater collection and infiltration, a high-performance thermal building envelop, geothermal heating and cooling, natural daylighting, automated user-demand lighting and plumbing controls, low-flow plumbing fixtures, low- and no-VOC materials with recycled content, and construction waste management plan to divert construction waste from landfills.

This new facility will not only greatly enhance the visitor experience but will aid the park in operational efficiencies by centrally locating operation, maintenance and educational staff.

DCNR Secretary Cindy Adams Dunn, FDC Director Alfred Uzokwe, PE and Section Chief Michael Twigg, RA, LEED AP and State Representative Doyle Heffley, participate in the groundbreaking with other members of DCNR staff.

Bureau of Facility Design & Construction Director, Alfred Uzokwe, P.E. with Architectural Section Chief, Michael J. Twigg, R.A., LEED AP
Presque Isle Beach 8 Upgrades Complete

John Jaskolka, P.E., James Kalp LEED A.P.

A DGS Capital Budget project was recently completed at Presque Isle State Parks Beach 8. Presque Isle State Park is a 3,200-acre sandy peninsula that arches into Lake Erie. As Pennsylvania’s only “seashore,” Presque Isle offers its visitors a beautiful coastline and many recreational activities, including swimming, boating, fishing, hiking, bicycling, and in-line skating just to name a few. The park attracts about four million visitors annually making it not only the most visited Pennsylvania State Park, but one of the most visited state parks in the nation. Swimming on the sandy shores of Lake Erie is one of the parks most popular activities. The park has nine designated swimming beach areas.

Beach 8 also known as Pettinato Beach had become underutilized by beach visitors. The facilities at beach 8 including the parking area had reached their serviceable life expectancy and had become somewhat unattractive to visitors and a steep financial investment from a maintenance standpoint. A major infrastructure investment was long overdue.

Through a Capital investment project through the Department of General Services (DGS) a major rehab of Beach 8 area was undertaken. The project scope included demolition of the existing facilities and construction of two new toilet/dressing room buildings and concession building. The buildings are of solid precast concrete including exterior and interior finishes. The toilet building is of individual user, unisex toilet/changing room design. The precast concrete design facilitates easy cleaning and can better withstand the severe Erie shore winters. The work included relocating utilities underground and extensive site work to provide for more efficient vehicular and pedestrian use. New parking lots incorporated the use of various rain gardens to capture and treat stormwater runoff; and areas of stabilized turf parking spots. This will allow the lots to be “cooler” than an asphalt lot. Landscaping of the site includes natural wild grasses planted to reduce the amount of mowing. A paved promenade walkway was also constructed to connect Beach 8 to Beach 7.

The project design and construction services were managed by DGS in coordination with staff from the Bureau of Facility Design & Construction, Bureau of State Parks and Presque Isle State Park. Work began in the summer of 2017 and the project had a “soft” opening on July 14 of this year. The newly completed project is much more modern and user friendly to visitors and maintenance staff alike. The improvements should serve users and the Department for many decades to come.

The project included a new concession building (left) and two new toilet/dressing room buildings (right)

A new paved promenade walkway connecting Beach 8 to Beach 7 makes access to the new facilities readily accessible

Project Capsule
Project Number: DGS-163-36
DCNR Coordinator: John P. Jaskolka P.E.
DGS Coordinator: Samuel P Genovesi
Gregory Kaliszewski
Rebecca Schoone
Designer: Jeff Owens
Roth Marz Partnership, PC
General Contractor: Perry Construction Group Inc.
Electrical Contractor: A & MP Electric
Construction Cost: $2,492,900.00
### Bidding Summary - June 2018

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<tr>
<th>Project ID</th>
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<th>Bid Date</th>
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<tr>
<td>FDC-007-101916.1</td>
<td>Bald Eagle State Forest Structure Replacement Winters Road Over Cherry Run</td>
<td>June 2018</td>
<td>$435,391.00</td>
<td>Rylind Construction</td>
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<td>LTT Trucking LLC</td>
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<td>FDC-200-102205.4</td>
<td>Moraine State Park Standby Generator Hook-Up</td>
<td>June 2018</td>
<td>$23,032.00</td>
<td>Wagner Electric &amp; Construction</td>
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<td>French Creek State Park Repairs to Scotts Run and Hopwell Dams</td>
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<td>$1,086,638.00</td>
<td>Flyway Excavating</td>
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<td>FDC-417-100202.1</td>
<td>Ricketts Glen State Park Replacement of Sewage Lift Station 3</td>
<td>June 2018</td>
<td>$137,000.00</td>
<td>JP Environmental LLC</td>
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<td>FDC-514-101276.1</td>
<td>Promised Land State Park Repair and Repave Roads</td>
<td>June 2018</td>
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<td>FDC-218-102512.1</td>
<td>Laurel Mountain State Park Repairs to Oak Pond</td>
<td>June 2018</td>
<td>$37,500.00</td>
<td>G Salandro Landscaping LLC</td>
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<td>FDC-013-101807.1</td>
<td>Elk State Forest Structure Replacement Huffman Farm Road Over RED Mill Brook</td>
<td>June 2018</td>
<td>$466,453.00</td>
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### Bidding Summary - July 2018

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<td>Michaux State Forest Structure Replacement Milesburn Road Over Burd Run</td>
<td>July 2018</td>
<td>$93,117.56</td>
<td>Cottle’s Asphalt Maintenance</td>
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<td>FDC-007-101772.1</td>
<td>Bald Eagle State Forest Structure Replacement Engle Road Over Tunis Run</td>
<td>July 2018</td>
<td>$328,829.00</td>
<td>Wolyniec Construction Inc.</td>
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<td>FDC-019-00000.1R</td>
<td>Delaware Forest District District Office Sewer Tie-In and STP Demolition</td>
<td>July 2018</td>
<td>$124,600.00</td>
<td>Rutledge Excavating Inc.</td>
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<td>FDC-425-101660.1</td>
<td>Tyler State Park Lift Station Rehabilitation</td>
<td>July 2018</td>
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### Bidding Summary - August 2018

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<td>FDC-016-101812.1</td>
<td>Tioga State Forest Structure Replacement Bridge No. 16-0030</td>
<td>August 2018</td>
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<td>Lycoming Supply Inc.</td>
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<td>FDC-018-101814.1</td>
<td>Weiser State Forest Structure Rehabilitation Bridge No. 18-0007</td>
<td>August 2018</td>
<td>$793,849.47</td>
<td>Jay Fulkroad &amp; Sons Inc.</td>
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### Bid Summary Values:
- June Total Bids/Value: 8/$3,469,436.72
- July Total Bids/Value: 4/$760,046.56
- August Total Bids/Value: 3/$1,109,599.47
- September Total Bids/Value: 4/$1,139,457.57

**INTERESTED IN DOING WORK FOR DCNR?**
For a list of current projects out for bid, visit the Bureau’s current bid proposal page at:

[http://www.dcnr.pa.gov/Business/ConstructionBids/Pages/default.aspx](http://www.dcnr.pa.gov/Business/ConstructionBids/Pages/default.aspx)

Be sure to check back frequently for updates.
Move of Historic 1784 Stone Structure Completed in New Hope

James Kalp LEED A.P.

On October 24 DCNR staff joined the crowds of onlookers in New Hope to witness the move of a piece of storied history.

After years long efforts of considerations, discussions, debates, reviews and approvals, an original 1784 stone structure was safely moved approximately 1,000-feet from its longtime home along the Delaware Canal, at 274 River Road to it’s new location at South Main and New Street.

Most recently known as the Chez Odette restaurant, and formerly the River House, the structure faced an uncertain fate. To make way for new development the structure faced potential demolition. But through open discussion and considerations between the developer, local officials, historical preservation groups, concerned citizens and DCNR staff an agreement to preserve the original 1784 stone structure was reached.

The developer funded the demolition of the many non–historic features that had been added on to the original structure over the years, constructed the new foundation, moved the structure and will perform some rehab and restoration work. Upon completion of the work, the structure will be turned over to DCNR who will use the structure as a multi–functional space to include educational and interpretive messaging of the history of the Delaware Canal.

Facility Design & Construction staff has and continues to provide valuable support throughout the process.

As part of the Chez Odette restaurant, the original stone structure (center) had seen numerous modifications and additions over the years.

A crew from Wolfe House & Building Movers moves the structure north along River Road (SR32)

The original River House is set in place above its new foundation at South Main and New Street in New Hope.
Rehab of Culturally Historic Wrought Iron Bridge Complete
Wayne Nguyen, P.E. James Kalp, LEED AP

During the cleaning of the beam seats a large amount of section loss was noticed on the steel pins which connect the low chords (eye bars) to other truss members at the bearings. To safely reopen the bridge these pins and the eye bars (low chords) needed to be replaced. The Department agreed to permit the contractor to utilize his consultant to prepare repair plans to replace these members. PHMC was consulted during this process and suggested the new replacement members should ideally match the current member’s rectangular eye bar shape to preserve historical accuracy. The entire preservation work took almost three years to complete due to a delay of the additional work found during construction and their associated design time.

The Department recognized the cultural value of the historic wrought iron truss bridge and wanted it preserved and kept in service. The end product is the same, one-lane wide bridge with a 7-Ton load carrying capacity. The limited carrying capacity is associated with wrought iron members as the type of metal used and not associated with the condition of the bridge. The repair upgraded the bridge to “satisfactory” condition Coupled with a new timber deck, this project will result in reliable service for travelers for years to come.

The scope of work included reconstruction and repair of the abutments and stone masonry seats; cleaning, repairs, bearing lubrication; a new timber deck; installation of a membrane waterproofing and pvc drainage system; repointing of the stone masonry; installation of rip rap (scour protection) at the abutments; localized cleaning and treatment of the wrought iron structure with a corrosion preventative coating; replacement of the safety railing and curb and approach roadway repairs.

Prior to the rehab project, the existing bridge pictured here was designated as “structurally deficient”

Rehab of the bridge afforded opportunity to maintain the cultural/historic aspect of the 1897 structure

In a quaint rural setting, an existing, single lane, wrought iron through truss bridge carries Rock Run Road over Loyalsock Creek in Forest District 20, Laporte Township, Sullivan County. The bridge was constructed in 1897 by Horseheads Bridge Company from Horseheads, New York, and rehabilitated in 1983, when the timber stringers were replaced with 10-inch steel I beams. It is a single span, pin–connected, through truss bridge with a clear span length of 117–feet.

The bridge had been formally posted with a weight limit of 7 tons at least since 1995 due to the lack of ductility associated with wrought iron bridges. This posting was based on age, inspection and sound engineering evaluation. In 2010, the bridge was found to be “structurally deficient” due to poor condition of the bridges substructure and timber deck. In 2014 the Department contracted with our consultant to prepare a preservation plan to upgrade the condition of the bridge to extend its life expectancy.

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### Bidding Summary - September 2018 (cont’d.)

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Details</th>
<th>Bid Price</th>
<th>Apparent Low Bidder</th>
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<tbody>
<tr>
<td>FDC-001-101771.1</td>
<td>Michaux State Forest Structure Replacement Bridge No. 01-0030 Ridge Road over Tributary to Cold Spring Run</td>
<td>$92,600.00</td>
<td>Farhat Excavating</td>
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<tr>
<td>FDC-003-101779.1</td>
<td>Tuscarora State Forest New Bridge Structure Montgomery Trail Over Trout Run</td>
<td>$422,779.57</td>
<td>Wen-Brooke Contracting Inc.</td>
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<td>FDC-009-101798.1</td>
<td>Moshannon State Forest Structure Replacement Dubec Road Over Left Branch Moose Creek</td>
<td>$250,415.00</td>
<td>Lycoming Supply Inc.</td>
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<tr>
<td>FDC-016-101625.1</td>
<td>Tioga State Forest Structure Replacement Right Asaph Road Over Bear Wallow Branch</td>
<td>$373,663.00</td>
<td>Lycoming Supply Inc.</td>
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</tbody>
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### Bureau Activities & News

- **On August 21,** Western Regional Engineer, John Jaskolka, P.E. participated in a ground-breaking ceremony, with fellow DCNR employees as well as state and local leaders for a groundbreaking ceremony marking the start of major state-supported improvements to the Polly Hill Campground at Ryerson Station State Park, Greene County. The almost $1.4 million project, overseen by the Department of General Services, will include the revamping of recreational vehicle campsites, addition of new camping cottages and shower-house, road resurfacing, and other park improvement projects.

- **On November 1,** several of the Buchannan RMC project design team will attend the Central PA USGBC Forever Green Awards along with Deputy Secretary Michael Walsh and Secretary Cindy Adams Dunn. The project has been awarded the organizations 2018 “Improving the Acceptance of Green” award. The project is LEED Silver certified. This is the fourth year in a row that a DCNR, USGBC LEED certified project has received the award.

- Various FDC staff members attended individual events, throughout the DCNR Fall Sustainability Tour from October 3 thru 5. FDC staff members have contributed and will continue to contribute to DCNR’s sustainability efforts which include, high performance buildings, solar applications, electrical vehicle charging stations and many other energy and resource conservation efforts.

### Questions – Comments?

We value our reader’s feedback. Send your questions or comments to:

Chief Editor: Jim Kalp, [jakalp@pa.gov](mailto:jakalp@pa.gov)
Contributing Editor: Seeking Volunteers!
Administrative Support: Sharia Turner, [shartturner@pa.gov](mailto:shartturner@pa.gov)

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**Bureau Mission:**

To provide multi-disciplined technical support to the other bureaus in DCNR in the areas of project design, project inspections, construction management, contract administration, surveying and other technical advice and consultation.