

# State Aquatic Nuisance Species (ANS) Program Summary for Colorado Legislators per SB 08-226



## Colorado Parks and Wildlife January 2019

The Colorado Parks and Wildlife's (CPW) Aquatic Nuisance Species (ANS) Program continues to meet the challenge of protecting the state's water resources and infrastructure from the establishment of harmful ANS. Colorado remains free of adult zebra and quagga mussel reproducing populations, while fellow western states without mandatory inspection programs (such as Kansas, Oklahoma, Texas, Arizona and Utah) continue to find new infestations. Colorado has prevented the introduction of this invasive species due to the diligent efforts of watercraft inspection and decontamination staff, as well as early detection monitoring, education and enforcement

actions.

In 2018, CPW intercepted a record number of 51 infested watercraft from out of state and decontaminated them prior to allowing them into state waters (the previous record was 26). CPW's invasive species program, along with partners, is critical to maintaining opportunities for recreation, preserving natural resources and protecting water supply and delivery infrastructure for municipal, industrial and agricultural use.

Prior to the July 1, 2011 merger of the former Division of Wildlife (CDOW) and Colorado State Parks (Parks), the two ANS Programs operated independently per SB08-226. For the purpose of this report, the activities occurring from 2008-2011 are attributed to the former CDOW and Parks agencies independently. Activities from 2012-2018 are attributed to CPW.

CPW provides ANS support to all waters of the state, and to all inspection stations, regardless of jurisdiction. Services provided by CPW include site-specific planning, training/certification, some watercraft inspection

Quagga mussels covering the shoreline at

and decontamination, quality control assessments, data collection development and support, law enforcement, educational materials, workshops and conferences, sampling and monitoring, laboratory analysis and species identification, and cost-share opportunities.

### **Program Goal**

The goal of the ANS Program is to protect the state's natural resources, outdoor recreation and water supply systems through prevention of new introductions and reduce the spread of costly invasive species, such as zebra or quagga mussels, in Colorado.

### **Legal Authority**

"The ANS Act" Senate Bill 08-226: In the 2008 legislative session the General Assembly recognized the devastating economic, environmental, and social impacts of aquatic nuisance species (ANS) on the aquatic resources and water infrastructure of the state. The General Assembly further recognized the potential of recreational vessels to be a significant source of the spread of ANS in Colorado. Therefore, the General Assembly enacted Senate Bill (SB) 08-226, effective May 29, 2008, to implement actions to detect, prevent,

contain, control, monitor, and, whenever possible, eradicate ANS from the waters of the state and to protect human health, safety, and welfare from ANS.

The Act defines ANS as exotic or nonnative aquatic wildlife or any plant species that have been determined to pose a significant threat to the aquatic resources or water infrastructure of the state. It makes it illegal to possess, import, export, ship, transport, release, plant, place, or cause an ANS to be released. The Act allocated funding to ANS programs in both the former CDOW and Parks. It provides authority for CPW to certify individuals as authorized agents and qualified peace officers to inspect, and if necessary, decontaminate or quarantine watercraft for ANS. It also provides authority for trained authorized agents to inspect and decontaminate watercraft for ANS.

CPW Parks Chapter 8 Regulations on ANS: SB 08-226 specifically authorizes and requires the Board of Parks and Outdoor Recreation to promulgate rules needed for the administration and enforcement of the Act. The Parks Board adopted regulations in Chapter 8 for ANS, effective April 1, 2009. These regulations were jointly written and apply to both State Parks and Division of Wildlife, and address all waters of the state. In 2016, CPW updated the P-08 regulations to reflect the merger of Parks and Wildlife and to update regulations to meet current standards and protocols for watercraft inspection and decontamination (WID). In 2017, the regulations were further updated due to citizen's petition which altered the exempt watercraft list.

"Concerning the Funding for Aquatic Nuisance Species" House Joint Resolution 17-1004: In 2017, the Colorado General Assembly unanimously passed HJR 17-1004 which affirmed the State Legislature's commitment to ANS management in Colorado, and the priority that the legislature places on the ANS Program within the state's operations and encourages the federal government to assist the state with implementation of the ANS Program as outlined in the State ZQM Management Plan. There are no changes to statutory authority or operational procedures which would impact law enforcement operations in HJR17-1004.

"The Mussel Free Colorado Act" House Bill 18-1008: In 2018, the Colorado General Assembly passed the Mussel Free Colorado Act which created the ANS Stamp (a fee for motorized watercraft and sailboats using Colorado waters – residents and non-residents), increased fines for select ANS violations, and created a reimbursement process for CPW to get restitution for full decontaminations of quarantined or impounded watercraft.

Following the passage of HB18-1008, CPW formed an internal implementation team consisting of invasive species, public education and information, marketing information technology, sales, licensing, registration, marketing, and financial services staff. The team achieved the implementation goals set forth to have the ANS stamp available for purchase for in-state boaters renewing registration in November and December of 2018, and continuing in 2019. The ANS stamp for out of state boaters will be available beginning January 1, 2019 online, at CPW offices and at all 700+ sales locations. The team also updated the website, issued rack cards and posters to offices, WID stations and sales locations, and participated in public education and media events. Similarly, the team also produced information to aid customer service and sales agents with the sale of the ANS stamp.

In addition, an internal law enforcement team was created to update guidance documentation for officers relative to the new statute. The team consisted of fourteen officers representing all four regions and two invasive species staff members and met weekly from September through December. They produced a Law Enforcement Policy and updated the 2009 Law Enforcement Guidance Document. These documents are currently being routed internally for approval and adoption.

### History of Zebra and Quagga Mussels in Colorado

Zebra mussels, and their close relative quagga mussels, are highly invasive aquatic species that negatively impact plankton communities, fisheries, and water based recreation; in addition to threatening our water storage and distribution systems for municipal, industrial and agricultural use.

The ANS Program has been successful in stopping the continued inoculation of zebra and quagga mussels, and other ANS, into Colorado's waters by watercraft. There has never been an adult zebra or quagga mussel found in a Colorado water body. However, the larval stage of the mussels, known as veligers, have been detected in several waters in the past.

In August 2017, quagga mussel veligers were identified at Green Mountain Reservoir by the Bureau of Reclamation through microscopic analysis of water samples and subsequently positively identified using DNA testing. CPW confirmed the federal results through genetic testing at an independent laboratory. It is unknown if the veligers were dead or alive at the time of detection. Upon confirmation, CPW increased monitoring at the reservoir, deployed a scuba dive team and worked with the Heeney Marina to implement WID containment procedures. The site team was gathered to further determine actions necessary for containment and rapid response was initiated.

Colorado follows the western regional standards for listing and de-listing water bodies for zebra and quagga mussels, as documented in the *Western Regional Panel's Building Consensus in the West Committee*. Per this standard, **Green Mountain Reservoir is currently listed as a SUSPECT reservoir for quagga mussels.** A suspect reservoir requires three years of negative testing to be de-listed to negative. There were no new detections in 2018.

- If another veliger or an adult be detected and confirmed through both microscopy and genetic analysis by two independent laboratories, the reservoir status will be upgraded to positive. A positive reservoir requires five years of negative testing to be de-listed to negative.
- If a reproducing adult population is found, the reservoir will be listed as infested. It is unlikely that an infested reservoir would ever be de-listed, but standards allow for this with five years of negative testing following a successful eradication event. There are currently no known treatments for eradication in an open water system making de-listing impossible for infested waters.

### Previous Detections of Zebra and Quagga Mussels in Colorado:

- Pueblo Reservoir tested positive for zebra and quagga mussel larvae (veligers) in 2007 and for quagga mussel veligers in 2007, 2008, 2009 and 2011.
- Grand Lake tested positive for one zebra mussel and one quagga mussel veliger in 2008. There have been no verified detections at Grand Lake since 2008.
- Granby Reservoir, Shadow Mountain Reservoir, Willow Creek Reservoir, Tarryall Reservoir and Jumbo Reservoir all tested positive for one quagga mussel veliger in 2008. There have been no verified detections at any of these waters since 2008.
- Blue Mesa Reservoir tested positive for quagga mussel eDNA in 2009, 2011 and 2012 by the Bureau of Reclamation.

#### De-Listing Positive Waters:

- Pueblo Reservoir was de-listed for quagga mussels in January 2017 following five years of negative results.
- Pueblo Reservoir was de-listed for zebra mussels in January 2014, along with the de-listing of Granby, Grand Lake, Shadow Mountain, Willow Creek, Tarryall, Jumbo and Blue Mesa.
- Green Mountain will be delisted in January 2021, if no further detections occur in 2019 and 2020

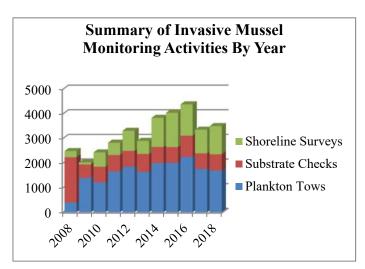
### Other Priority Aquatic Nuisance Species in Colorado

- Eurasian watermilfoil (EWM) An invasive aquatic plant known to many Front Range locations, Navajo Reservoir, and the Rio Grande. The Colorado Dept. of Agriculture requires management per the State Weed Act and Rules.
- New Zealand Mudsnails (NZMS) First detected in Colorado in 2004. Snails continue to be found in new locations annually, including recent detections in the Gunnison River, Fourmile Canyon Creek, Monument Lake, Trinidad Lake, and Uncompanyere River.
- Rusty Crayfish There are four known locations statewide. Regulation prohibits the live transport from positive locations, in addition to all waters west of the Continental Divide where there are no native crayfish. There were no new detections of rusty crayfish in 2018.

# 2018 Program Activities:

### Sampling/Monitoring

The ANS sampling and monitoring program, and the ANS laboratory work, were reduced in 2017 and maintained at lower levels in 2018 due to funding concerns. The sampling teams maintained zebra and quagga mussel monitoring requirements for lakes and resevoirs, but were unable to monitor for other ANS, sample flowing waters, perform crayfish trapping, or conduct plant inventories. The frequency and quantity of sampling events on lakes and reservoirs was also reduced due to funding concerns. CPW intends to resume full monitoring.



CPW has sampled 584 "at-risk" waters for aquatic

invasive species over the last ten years. It was through this sampling program that invasive mussel veligers were first detected in Colorado. While CPW ANS staff has historically monitored the state's public waters for numerous invasive plants and animal species, the focus of sampling is on early detection of zebra and quagga mussels. As such, the state follows a three-tier sampling protocol targeting the three life cycles of the zebra or quagga mussel: (1) conducting plankton tows to find the veligers, (2) deploy and check substrates to find the juvenile "settlers" or attached adult mussels and (3) conduct surveys along the shoreline and existing structures for settled juveniles or attached adult mussels. The state requires three steps to identify, verify and confirm identification of zebra or quagga mussel veligers (1) visual analysis of plankton tows using a cross-polarized light microscope (2) DNA verification utilizing polymerase chain reaction [PCR] and (3) DNA confirmation utilizing gene sequencing to confirm genus and species.

In 2018, crews sampled 181 standing and approximately 11 flowing waters statewide. In addition to the sampling efforts performed by CPW, the National Park Service contributed 38 plankton samples. A summary of the sampling efforts can be seen in the graph above. There were no detections of zebra or quagga mussels in Colorado.

### **Watercraft Inspection and Decontamination (WID)**

CPW coordinates a vast network of WID stations that are operated by CPW, the National Park Service, Larimer County, several municipalities, and numerous private industry locations including businesses, concessioners, marinas, clubs and private lakes. In total, the state has collectively performed over **4.4 million inspections** and **96,867 decontaminations** since 2008.

Per the state ANS Regulations, trailered watercraft must submit to an inspection, and decontamination if needed, prior to entrance in Colorado's waters following boating out of state or boating on a positive or suspect water. Boaters are also required to submit to an inspection prior to entering a water body where inspections are required by the managing agency. All persons performing inspections and/or decontaminations must be certified by CPW.

CPW taught 57 WID certification courses in 2018, in addition to maintaining an online re-certification program for experienced inspectors and decontaminators. There have been a total of 811 trainings since the program's inception. In addition to the online course for experienced staff, the Invasive Species Program within CPW also maintained two other specialized WID courses: (1) WID



Trainer's certification and (2) Advanced Decontamination. CPW certified 755 individuals this year, for a total of 6,854 people certified or re-certified in WID since the training program was implemented in 2009.

In 2018, CPW authorized 72 locations to perform watercraft inspection and decontamination. Of those, Green Mountain Reservoir was operated as a containment operation for quagga mussel veligers after their detection in August, and ten locations operated as containment for other ANS. The focus of the containment program is to inspect watercraft leaving the lakes/reservoirs to prevent boats from moving ANS overland into currently uninfested areas, while maintaining prevention activies upon entrance to the reservoir.

Sixty-two locations operated as prevention locations. Prevention locations are those that are negative for all ANS or are not located at a waterbody (e.g. offices or marine dealers).

A total of 474,519 inspections and 19,111 decontaminations were performed in Colorado in 2018.

There continues to be a large increase in the number of decontaminations performed as a direct result of CPW adapting to mitigate new threats. New invasions in neighboring states, such as at Lake Powell in Utah, continue to increase the need for diligent prevention.

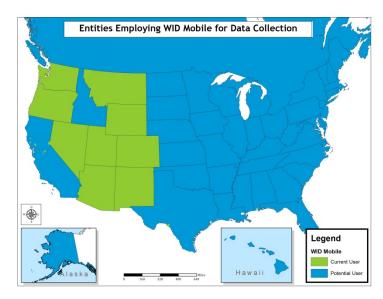
Another factor increasing Colorado's need for decontamination is the increase in mussel infested waters in other states. In the last year, Texas, Oklahoma, Kansas, California, and other eastern states had new waters infested with zebra or quagga mussels because of the lack of mandatory prevention WID programs. These new infestations in other states illustrate the importance of Colorado's successful program to continue protecting our waters and infrastructure from invasion.

Research publications indicate zebra or quagga mussel veligers can survive up to 27 days in standing water on watercraft which increases the need to decontaminate parts of watercraft which can't be drained (e.g. ballast tanks).

Lastly, waters in close proximity to, or positive for, other ANS such as New Zealand mudsnails or Eurasian watermilfoil, increase the need to perform more decontaminations to limit their spread within state. CPW and their partners revised mandatory standing water decontamination triggers in 2012 to reduce the threat of invasion from viable zebra or quagga mussel veligers living in standing water, to protect against watercraft coming from other state's infested waters, and to reduce the spread of other invasive species.

### **WID Data Sharing System**

CPW successfully continued utilizing the WID mobile data collection system at 50 authorized locations within the state of Colorado. This application is compatible on all iOS and Android devices which greatly reduces the effective cost of operating mobile data collection on boat ramps across the state, and reduces costs for data entry. It also provides for much greater reliability in data collected in the field at inspection stations. For that reason, Colorado secured federal grants for the 2017 and 2018 boating seasons from the U.S. Fish and Wildlife Service, and from the Bureau of Reclamation for the 2019 boating season to make the CPW application available to certified WID locations in states across the western US.



This Regional Data Sharing System for WIDS has greatly increased communication, efficiencies, customer service and provided unique opportunities for data and risk analysis to prevent infested watercraft from moving into negative locations without interception.

In 2018 – Arizona, Montana, Nevada, New Mexico, Utah, Washington, Wyoming and the Lake Tahoe Regional Planning Agency participated with Colorado in employing The Regional WID Data Sharing System as their primary form of data collection. With the benefits of regional data sharing proving to be abundant, infested southwestern states have been using the system to send out notices of watercraft leaving infested waters. This d timely communication has directly increased the number of infested watercraft being intercepted within the western US.

It is expected that additional states performing WID will be joining in 2019 and that other agencies, such as the National Park Service, will continue to increase the use of the system in the future. As user numbers increase, this sytem will continue to improve communications amongst jurisdictions and assist watercraft inspectors in assessing the risk of watercraft intending to launch at their water bodies.

### **Mussel Boat Interceptions**

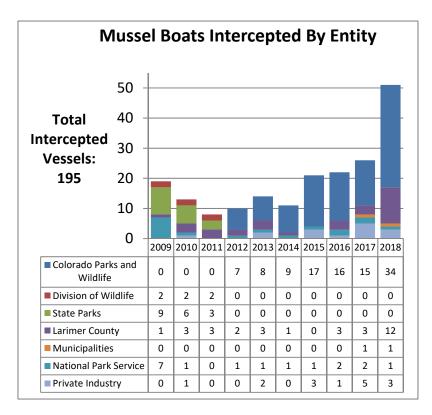
This year the state intercepted more watercraft infested with zebra or qugga mussels than ever before. All of these watercraft were fully decontaminated prior to being allowed into Colorado's waters. Since 2009, a total of 195 boats with attached adult zebra or quagga mussels were intercepted coming into Colorado.

In the past, infested vessels have been intercepted at Barr Lake, Blue Mesa, Boulder Marine, Boulder Reservoir, Boyd Lake, Canon Marine, Carter, Cherry Creek, Chatfield, Clear Creek, Crawford, Denver CPW Office, Dillon, Eleven Mile, Frisco Bay Marina, Granby, Grand Lake, Grand Junction CPW Office, Great Lakes Marine, Highline, Horsetooth, Jackson, Lathrop, McPhee, Navajo, North Sterling, Pueblo, Ridgway, Roadside (SW Colorado), Ruedi, Shadow Mountain, Spinney Mountain, Stagecoach, Steamboat Lake, Strontia Springs, Sweitzer, Taylor Park, Turquoise, Vallecito and Williams Fork.

The infested vessels were coming from Arizona, California, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Michigan, Minnesota, Mississippi, Missouri, New York, Nevada, Oklahoma, Ohio, Pennsylvania, Texas, Utah and Wisconsin. The majority of the intercepted vessels were coming from Arizona, Lake Powell, the Great Lakes, or Mississippi River states. All boats were fully decontaminated to ensure all mussels were dead, and no mussels were visibly attached to the vessel.

### **WID Quality Control**

The CPW Quality Control and Field Support Team perform quality control evaluations annually at all state certified watercraft inspection and decontamination stations to ensure that standard procedures are being followed, per regulatory requirements. The team also ensures that stations are stocked with educational



materials and provide on the job training to inspectors and supervisors.

The quality control program was temporarily paused in 2017 due to budget shortfalls from the lack of severance tax and was implemented at minimal levels in 2018. CPW intends to return to full implementation of the quality control program in 2019.

### **Protocol Development for Watercraft Inspection and Decontamination**

To ensure the protection of the state's waters and the validity of the state certification program, CPW has had strict field protocols and training regiments since the program's inception. All watercraft inspection and decontamination staff in Colorado attends the same training and adheres to the same protocols. Development and implementation of effective standardized protocols is a priority. Many other states base their procedures and training programs off Colorado's numerous publications.

In 2014, the Western Regional Panel on ANS and the 100<sup>th</sup> Meridian Initiative adopted the Colorado training program as the regional standard for certification of boat inspectors and decontaminators (taught by Pacific States Marine Fisheries Commission). The student and trainer's curriculum, as well as field procedures, have been adapted for other states and were published in early 2015. They were updated in 2018 and are scheduled for another update in 2019. The CPW training program is being taught nationally, as it has been proven to protect waters.



### **Information and Outreach**

CPW and partner agencies have implemented a comprehensive, multi-faceted, Invasive Species public education campaign. The cooperative effort focuses on boaters and anglers, primarily to prevent the spread of ANS utilizing

a variety of mediums, including billboards, boat ramp signage, brochures, as well as staffing tradeshow and expo booths to convey this message.

The Invasive Species Program launched a series of new webpages in 2016 (with numerous updates in 2017 and 2018) focused on the program's activities, how CPW's customers can help to stop the spread of both terrestrial and aquatic invaders, and providing awareness as to the mandatory regulations in place for watercraft.

The invasive species program within CPW has been conducting information, education and outreach efforts for terrestrial and aquatic plants (noxious weeds), animals, insect and disease invasive species for a number of years. Accomplishments include distribution of tens of thousands of printed rack cards, brochures, handouts, DVDs, posters and signs at offices, boat ramps and water-access points. In addition, staff have implemented an aggressive media relations campaign, using press releases and conducting web-based, radio, print and television interviews. CPW staff hosted numerous outreach seminars to boating and angling groups, marine dealers, HOAs, watershed groups, basin roundtables, ditch companies, municipal water managers and providers, schools and youth educational opportunties.

### **Additional ANS**

### **Rusty Crayfish**

There were no new detections of Rusty Crayfish in 2018. Rusty crayfish is an invasive species that was first discovered in 2009 in a main-stem impoundment of the Yampa River and at two river locations between Stagecoach Reservoir and Steamboat Springs. The ANS Program conducted extensive surveys statewide and detected a population in Sanchez Reservoir State Wildlife Area in 2010 and Stagecoach State Park in 2011.

Populations have been managed through manual removal of adult rusty crayfish from 2010-2015 to reduce the reproducing population in the reservoirs and limit impacts to native communities and users. In 2016, CPW staff



monitored the Yampa River's population and determined the manual removal was successful, as very few rusty crayfish were found in the river. Since they are still abundant in these reservoirs, trapping and monitoring efforts will be evaluated and potentially implemented, for future years.

CPW implemented regulations passed by the Wildlife Commission in November 2010 in which all crayfish caught west of the Continental Divide must be immediately killed and taken into possession, or immediately returned to the water from which they were taken. There are no crayfish native to the Western Slope. The same restriction applies to Sanchez Reservoir in Costilla County due to the invasive rusty crayfish.

Rusty crayfish are native to the Ohio River Basin and have expanded their native range to include several U.S. states and Ontario, Canada. They colonize lakes, rivers, and streams throughout North America. They are more aggressive than native crayfish, better able to avoid fish predation, and can harm native fish populations by eating their eggs and young. They can displace native crayfish and hybridize with them. They graze on and eliminate aquatic plant populations that provide necessary habitat and food source for native fish and waterfowl.

#### New Zealand Mudsnail (NZMS)

NZMS was confirmed in several new locations in 2018 including numerous locations along the South Platte River between Eleven Mile Reservoir and Strontia Springs Reservoir. They were also discovered at Jimmy Camp Creek, Monument Reservoir and Trinidad Reservoir.

Previously, the NZMS was detected in Chatfield Reservoir, during an aquatic noxious weed survey for Eurasian watermilfoil, in 2015. There were detections from 2010-2013 in Fountain Creek in Colorado Springs, Spinney Mountain Reservoir, Eleven Mile Reservoir, Delaney Buttes Lakes, College Lake at CSU in Fort Collins, and Dry Creek within the City of Boulder.

The tiny invasive snail was first found in Colorado in 2004 in Boulder Creek, the South Platte River below Eleven Mile dam and the Green River in Dinosaur National Monument. There were no detections from 2005-2009.



New Zealand Mudsnail

These animals are accidentally transported and moved primarily by anglers. They hide in the mud on the bottom of boots and equipment. There is no viable method for control of these very small, asexual animals. CPW places a strong emphasis on angler education providing wader brushes and instructional rack cards to anglers. The only way to stop the spread of these tiny invaders is through educating anglers to clean their waders and gear in between each and every use.

#### Eurasian watermilfoil (EWM)

The Invasive Species Program has coordinated EWM management statewide since 2005. A detailed Geographic Information System (GIS) database of EWM locations and control efforts was developed and is maintained by CPW. The database is updated annually. CPW has actively controlled EWM with herbicide treatments at Lathrop State Park, St. Vrain State Park, and Chatfield State Park since their detections.

Not only is CPW concerned about the fisheries and ecological impacts from this noxious weed, it also poses a safety hazard to swimmers due to its dense structure that can cause people to get tangled and result in drownings. It also creates dense mats that provide ideal habitat for mosquitos which carry Wesst Nile Virus. EWM stops and slows the flow of water for agricultural and industrial use. Finally, EWM changes the water chemistry causing taste and odor problems for drinking water.

### **Regional Participation**

CPW provides regional and national leadership on efforts to stop the spread of zebra and quagga mussels and other ANS, including:

- Chair of the Western Regional Panel on Aquatic Nuisance Species
- Member of the Western Invasive Species Coordinating Effort
- Co-Chair of the Communications, Education and Outreach Committee for the Federal ANS Task Force
- Chair of the Western Association of Fish and Wildlife Agencies' Invasive Species Committee
- Member of the Association of Fish and Wildlife Agencies' Invasive Species Committee
- Member of the American Boating and Yachting Council's Technical Project Committee on ANS

#### **Operating and Financial Statement**

Senate Bill 08-226 created the Division of Wildlife Aquatic Nuisance Species fund within the state treasury and authorized a funding of \$3,917,244 in FY 08-09 towards the prevention, containment and eradication of aquatic nuisance species in state waters. This funding came from \$1,250,000 wildlife cash combined with \$2,667,244 from the operational account of the severance tax (Tier II). SB 08-226 appropriated \$1,304,544 of severance tax funding for the state fiscal year commencing July 1, 2009 and for every state fiscal year thereafter. The CDOW did not receive appropriated funding prior to July 1, 2008, so expenditures made for the 2008 Boating Season, prior to July 1, 2008 were paid for out of wildlife cash.

Senate Bill 08-226 also created the State Parks Aquatic Nuisance Species fund within the state treasury and authorized funding from Severance Tax (Tier II) in FY 08-09 of \$3,289,392. For FY 09 and beyond the Parks were funded at \$2,701,461. SB 08-226 authorized seven ANS FTE in Parks. In 2011, two FTE were eliminated and in 2012, one more of these FTE were eliminated.

Permanent CDOW staff time spent on aquatic nuisance species work was paid for with wildlife cash, including the Invasive Species Coordinator, from 2008-2013. Beginning July 1, 2013, the Invasive Species Coordinator and other CPW permanent employees are being paid out of the ANS Fund, which equates to roughly \$400,000 annually in CPW permanent staff time working on ANS.

The Colorado Supreme Court decision related to severance taxes in 2016 significantly reduced funding available for the ANS program. CPW began hosting stakeholder meetings in July 2016 seeking funding from partner agencies to provide dollars for upcoming boating seasons and the long term implementation of the ANS Program. The stakeholder's group has grown to 134 individuals from 74 entities, including U.S. Senator Michael Bennet and U.S. Senator Cory Gardner's offices. The most recent meeting was held on December 19, 2018.

CPW utilized ANS fund reserve dollars to pay for the 2016 boating season. In 2017, CPW provided agency dollars, redirected USFWS motorboat access grant dollars, and over \$1M in partnership grants, contracts and donations. Similarly, in 2018, ANS was funded with agency dollars, partner funding, grants and donations.

In FY2017-18 there was a general fund transfer from SB17-259 of \$3,636,634 into the ANS Funds, and in FY2018-19 there was a general fund transfer from HB18-1338 of \$3,636,634 into the ANS Funds. Per HB18-1008, the two Parks and Wildlife ANS Funds was combined into a single account in August 2018. CPW appreciates the support of the General Assembly in providing these allocations to continue ANS operations.

CPW intends to fund the 2019 boating season with revenue received from Mussel Free Colorado Act, combined with ANS Fund dollars and incoming partner contributions. Below is a summary of CPW's ANS Fund and cash expenditures on ANS for the last five fiscal years.

<b>Funding Source</b>	FY13-14	FY14-15	FY15-16	FY16-17	FY17-18
Parks ANS Fund	\$2,628,232.88	\$2,642,082.46	\$2,984,935.68	\$3,152,588.66	\$3,989,555.52
Wildlife ANS Fund	\$1,799,940.39	\$1,794,138.54	\$2,019,594.88	\$1,047,490.74	\$204,816.85
Other CPW Funds	\$29,506.51	\$3,765.19	\$121.07	\$246,853.81	\$176,129.00
Total:	\$4,457,679.78	\$4,439,986.19	\$5,004,651.63	\$4,446,933.21	\$4,370,501.37

Note: Figures include grant expenses within funds.

CPW has always leveraged ANS funds with partners in order to operate the ANS Program and provide the services Coloradan's have come to expect. CPW recognizes the partners that have provided direct financial contributions in the last year:

- Aurora Water
- CO Marine Dealers Association
- Colorado Springs Utilities
- CO River Water Conservancy District
- Denver Water
- Dolores Water Conservancy District
- Larimer County
- Northern CO Water Conservancy District

- Pueblo Board of Water Works
- Ruedi Water and Power, along with Cities of Aspen and Glenwood Springs, Towns of Basalt,
  Carbondale & Snowmass Village, Pitkin & Eagle Counties, CO River District, Ute Water District,
  Roaring Fork Conservancy, White River National Forest.
- U.S. Bureau of Reclamation
- U.S. Forest Service
- U.S. Fish & Wildlife Service
- U.S. National Park Service

It is important to recognize that while CPW provides sampling, monitoring, and laboratory analysis for all waters of the state; and provides training, quality control, signs, education, outreach, and many other support services for all WID stations in Colorado, the following municipal reservoirs' WID stations are funded by the municipalities themselves: Arvada, Aurora, Bear Creek, Boulder, Quincy, and Standley Lake. Denver Water provides funding to the Dillon and Frisco marinas for the WID station at Dillon Reservoir. The Colorado River Water Conservancy District provides funding to the Wolford Marina and Campgrounds to operate the WID station at Wolford Reservoir. Reudi Water and Power is the main funding source, along with other partners, for the WID station at Ruedi Reservoir. Finally, the WID stations at Twin and Turquoise Reservoirs are funded by a partnership effort between Colorado Spring Utilities, Aurora Water, Pueblo Board of Water Works and the Pike National Forest.

