Costs to Conduct the 2016 Mosquito Control Services for the Pelican Ranch Lake Community

Submitted to:

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1.0 INTRODUCTION

OtterTail Environmental, Inc. (OtterTail) is pleased to submit this proposal to Special District Management Services, Inc (SDMS) for the Beebe Farms Draw Pelican Lake Ranch Communty (PLR) mosquito control services. The following sections present our qualifications, approach, and costs. We have developed this proposal based on OtterTail's experience of providing Integrated Mosquito Management (IMM) services for similar projects throughout Colorado and managing the Pelican Lake Ranch Mosquito Control Program since 2006. We believe you will continue to find OtterTail the preferred choice to conduct these services, by providing solid mosquito science advice to the community's program managers and assuring the residents that they are getting great mosquito control at a reasonable price.

2.0 OTTERTAIL'S REFERENCES

Yes, we think we are the mosquito control experts extraordinaire, but don't take our word for it, TALK TO OUR CUSTOMERS! They are the best people to talk to about whether or not we are good at what we do in the mosquito business. Don't hesitate to call ANY of our clients.

Boulder and Jefferson Counties, the Cities of Greenwood Village and Westminster, and Lowry have been operated by other contractors in the past; therefore, they might best be able to distinguish whether we performed our services to satisfaction as compared to others. Some of our other mosquito project contacts and phone numbers include:

Boulder County Mosquito Control District: (2009 – present): Lane Drager, (303) 441-1178

Jefferson County Mosquito Control Services: (2005 – 2011): David Volkel, (303) 271-5730

City of Boulder Mosquito Control Services: (2003 – present): Rella Abernathy, (303) 441-1901

City of Westminster (2012 – present): Richard Dahl, (303) 658-2202

City of Greenwood Village (2006 – present): Kurt Nielsen, (303) 708-6156

City of Lakewood (2007; 2011 – present): Steve Carpenter, (720) 963-5244

City of Fort Morgan (2007; 2012 – present): Doak Duke, (970) 542-6311

City of Castle Rock (2012 – present): Jamie McCracken, (720) 733-6077

City of Federal Heights (2008 – present): Tim Williams, (303) 412-3598

Lowry Redevelopment Authority (2006 – present): Jean Lindholm, (303) 343-0276

Eagle County (2004 – 2005): Ray Merry, (970) 328-8757

Another important point we believe illustrates our company's quality is how long we have been under contract with the above entities, many for multiple renewal periods. This fact should speak for itself.

3.0 OTTERTAIL'S QUALIFICATIONS AND RESOURCES

OtterTail is a biological consulting firm with an interdisciplinary staff of environmental specialists who conduct mosquito monitoring and control services, research, baseline and feasibility studies, monitoring, permitting, environmental impact assessments and planning for many different types of projects. OtterTail successfully achieves your goals by devising programs that are both innovative and cost effective. What we believe puts us at the head of the pack is our objectives-based approach to all of our projects, whereby we first ask our clients what their objectives are, and then seek to implement those objectives.

3.1 OTTERTAIL'S IMM EXPERIENCE, COMPANY DESCRIPTION AND HISTORY

OtterTail has aquatic entomologists, mosquito control specialists, certified pesticide applicators, wetland scientists, and GIS specialists to meet all of your program needs. Our staff focuses on unique and innovative ways to protect human health, while still protecting the environment and reducing project costs through the use of the following services:

- Innovative surveillance (GPS/PDA integrated) & control plan development
- Mosquito habitat mapping (GIS and aerial photo based)
- Laboratory and field ID of mosquito larvae
- Mosquito monitoring/population tracking/trend analysis
- Field ID of target-species habitat areas that warrant treatment
- Biological larvicide application (*Bti*, *Bs*)
- Habitat modification
- Predatory species introductions
- Adult mosquito surveillance and laboratory ID
- Laboratory ID & preparation of mosquito samples for West Nile Virus (WNV) testing
- GPS integrated ultra low volume (ULV) pesticide application and success evaluation
- Public outreach and education programs
- Coordination (CDC, state/county health, city council)

OtterTail has extensive experience in the planning, coordination, and implementation of mosquito surveillance and control programs. We have developed several highly successful and innovative Integrated Mosquito Management (IMM) programs throughout Colorado. We have conducted or are conducting WNV surveillance and/or mosquito control efforts for:

- Boulder County Mosquito Control District
- Paonia Mosquito Control District
- Adams County
- Jefferson County
- Eagle County
- Weld County
- City of Boulder
- City of Centennial
- City of Greenwood Village
- City of Fort Morgan
- City of Westminster
- City of City of Federal Heights
- City of Greeley
- City of Lakewood
- City of Dacono
- Town of Castle Rock
- Town of Erie
- Town of Superior
- Lowry Redevelopment Authority
- RTD, numerous HOA's and Metro districts

Key staff that will be assigned to this project have specialized expertise in every area required for these services (e.g., IPM program development, planning, GIS and field mapping, mosquito identification, adult and larval mosquito control, health and safety, public outreach), and will continue to provide PLR with an integrated and effective program.

We are familiar with the many types of issues and concerns encountered while conducting our mosquito programs, and can work efficiently with your staff and residents to solve them. These experiences will allow OtterTail to provide SDMS and PLR with high quality development, planning, and management of a comprehensive program that has been tailored to meet your goals and objectives.

3.2 OTTERTAIL'S LICENSING AND INSURANCE

OtterTail is licensed as a commercial pesticide applicator by the Colorado Department of Agriculture (CDA) and complies with all state and federal laws. As standard protocol, we have been regularly inspected at our office by the CDA, assuring your organization that we comply with all of their requirements (e.g., proper pesticide storage, proper maintenance and documentation of equipment and personnel training, detailed check of our pesticide application records, etc.). All vehicles used in the service of our mosquito contracts carry valid insurance and comply with CDA regulations.

Our key mosquito-related personnel are all experienced team members and include certified CDA Qualified Supervisors (QS's). Our QS's fall under the "Commercial Pesticide Applicator License" of OtterTail and all seasonal technicians fall under the supervision of the QS's. We require all personnel involved in any contract (including seasonal technicians) to carry a valid driver's license.

OtterTail also maintains Comprehensive General Liability insurance, Automobile Liability insurance, Workers Compensation/Employers Liability insurance to protect you from any potential liabilities that may arise from the project.

3.3 OTTERTAIL'S LABORATORY AND SURVEILLANCE SERVICES

OtterTail operates an in-house surveillance lab that allows us to perform thousands of adult and larval identifications each season. We own state-of-the-art laboratory and identification equipment and up-to-date mosquito key books to ensure that all of our identifications are performed accurately. The identification of mosquito species can be an essential component to any properly managed mosquito surveillance and control program. Our primary mosquito identification experts all have several years of adult and larval mosquito species identification experience.

OtterTail has extensive experience in setting up and managing mosquito surveillance systems that will effectively achieve your specific goals. We routinely set and collect dozens of OtterTail-owned mosquito light and gravid traps each week during the mosquito season, as well as process and submit hundreds of mosquito samples to CDPHE for arboviral testing.

OtterTail has also developed several strict in-house quality control checks and protocols for all of our surveillance and trapping programs. These include very detailed trap location guides, trap set and pull forms, and quality assurance protocols for all of our data and reporting. We are constantly learning new ways to do things better and adding new protocols to enhance our programs whenever possible. These recently developed measures have greatly improved all of OtterTail's surveillance programs by minimizing the chance of errors in the field and reporting process and ensures quality service and reporting.

3.4 OTTERTAIL'S LARVAL SURVEILLANCE AND CONTROL SERVICES

OtterTail realizes that a properly managed larval surveillance and control program is the key to any effective mosquito control program. The foundation of a solid surveillance program should be comprised of an experienced and well-educated field crew. The majority of our permanent staff members have experience conducting mosquito larval surveillance work and many of our non-fulltime/seasonal mosquito technicians have more than one season with us, assuring our clients that we have the depth and breadth needed for solid program implementation. Our seasonal field technicians meet the Colorado Department of Agriculture's training standards by attending our field and classroom training programs. In addition to the initial training programs, OtterTail's Qualified Supervisors also provide regular training updates throughout each season for all of our field crews.

OtterTail applies pesticides certified for their use at the recommended application rates for each product it uses. For example, 5 pounds (or greater depending upon habitat conditions) per acre is our standard application rate for our *Bti* granule larvicide. We also perform a large number of quality control post-checks each season to ensure that our control treatments are effective. OtterTail owns all the equipment (power backpacks, spreaders, hand held GPS units, etc.) and has the manpower needed to provide you with a comprehensive and effective larval surveillance and control program at a great price.

Not only does OtterTail have the experienced staff and necessary equipment needed, we also utilize our Breeding Site Management Program (BSMP) to ensure that your larval control program will be effectively managed, tracked, and maintained. The BSMP is our standard method of site organization and tracking for the larval breeding sites. This method of site organization has proven to be a highly reliable, efficient, and "user friendly" system that many of our other clients have commended us on.

- **Key Components of OtterTail's Breeding Site Management Program (BSMP)**
    - Alpha-numeric grid system of the project area starts the linking process
    - Gridded into 1-mile aerial photo section cards
    - Section cards tied to specialized field forms
    - Field forms tied to electronic database

- **Why is the BSMP valuable?**
    - Designed and developed over several years
    - Effectively manages data gathering and tracking effort
    - Focuses/guides the field technicians (what to collect, where to collect, and when to collect it) which assure sites are not missed and are treated on a timely basis (the key to any larval program)
    - QA/ QC: Establishes an ability to track the effectiveness of the field technicians
    - Linked aerial photo section cards guide the technicians to the sites and assures there is no confusion on which site is linked to the field forms
    - Provides easy tracking of when technicians should revisit a site
    - Database enables effective tracking, reporting, and analysis of the data
    - Effective analysis enables improvements to the program

OtterTail incorporated a new tablet-based larval surveillance collection and management system into our mosquito programs in 2015. This is an automatic cloud-based collection and GIS system, complemented with GPS technology for record keeping, which was designed in-house by OtterTail's computer database and program specialist and staff, to provide spatially accurate data for mosquito larvae source inspections and pesticide applications.

Each field technician was equipped with a handheld tablet with GPS. In addition to the typical site data that is recorded during a site visit, the tablet and cloud-based system allows each inspection and treatment record to be complemented by a date/time stamp and GPS coordinates, as well as real-time location tracking of our technicians. This ensures that every larval inspection and treatment is being conducted at the correct location, while also significantly improving the program's surveillance efficiency. In addition to providing this valuable data of each site visit for record keeping purposes, the information is also used in the field to make sure properly timed visits are being performed at all of the mosquito sites. For example, field technicians can be alerted to when a habitat site inspection visit is due, ensuring that each potential habitat is checked and/or treated within its inspection time frame. New mosquito sites can also be recorded by the technician in the field and the software will allow automatic updates of the new site's GIS records as well.

3.5 OTTERTAIL'S ADULT CONTROL SERVICES

OtterTail conducts routine, large-scale adulticiding programs in-house, owns its own adulticiding equipment (truck mounted and hand held ULV machines, backpack misters, etc.) and has staff thoroughly trained and experienced in its use. Having been through Colorado's WNV epidemic of 2003, we have proven experience mobilizing quickly to provide spraying when the need arises.

OtterTail staff has extensive experience with adulticiding. For example, our senior mosquito specialist has been responsible for overseeing and performing mosquito pesticide spray-truck operations for several years and our staff has conducted literally hundreds of hours of ULV truck-mounted spraying. OtterTail staff has also conducted numerous detailed research studies on the effects and success rates of truck-mounted spraying.

This combination of extensive "behind the wheel" spraying experience and research of spray success gives you the assurance that spray events will be carried out expertly. OtterTail also has a pool of other companies we can team with for large-scale emergency situations (such as aerial adulticiding).

OtterTail's entire fleet of ULV-equipped vehicles is enhanced with the Monitor 4 system, which is a GPS based variable flow pump and sprayer control system. This system gives OtterTail the ability to

incorporate GPS and GIS into truck-mounted ULV applications, which can dramatically improve several components of an adulticiding program.

In general, this system increases accuracy of pesticide application and documentation. Specific improvements include 1) complete documentation of specific locations and amounts of spray applications; 2) assurance of a consistent application rate by its adjustment of spray volume with vehicle speed (including shutoff if vehicle speed exceeds pesticide label recommendations); 3) the ability to report linear miles of actual spraying rather than total vehicle trip miles; 4) the documentation of spray shut off for residents on "no spray lists"; 5) enhanced GIS data management and reporting efficiency; and 6) the ability to graphically display data in GIS mapping formats.

These latest technologies also allow for several instantaneous, automated and accurate reports of each spray event including:

- Application Reports - provides the miles, ounces and acres sprayed along with the average speed of application
- Chemical ID and Flow Rate - reports the type of chemical applied and it's flow rate
- Vehicle and Driver ID - allows reporting of activities by vehicle or driver
- Max and Average Speeds - reports the average and maximum speeds of the vehicle during applications
- Start/Stop Times - reports the location and time a vehicle and ULV started and stopped during applications

OtterTail is proud to be leading the way among Colorado's mosquito control contractors by equipping its entire truck mounted ULV fleet with this innovative adult mosquito control equipment. These latest technologies will ensure that you are receiving proper, safe and effective adult mosquito control applications during each and every spray event.

3.6 OTTERTAIL'S GEOGRAPHIC INFORMATION SYSTEM (GIS) AND TECHNOLOGICAL RESOURCES

OtterTail uses state-of-the-art software (ArcGIS) and hardware to implement our mapping efforts in-house. Several of our employees were trained to conduct GIS wetland aerial photo digital mapping by an expert formerly with the USFWS's National Wetland Inventory (NWI) mapping division. He was flown in to OtterTail's office to conduct this training and these staff have subsequently had extensive experience digitizing wet areas on high resolution aerial photos. By having experienced staff members and the latest GIS technologies in-house OtterTail can provide you with quality mapping and GIS products in a timely manner.

Along with our GIS resources, OtterTail also has a high tech server-based supported network with high speed internet, faxes, scanners, printers, and several computer workstations. OtterTail uses non-proprietary electronic databases and spreadsheets to track all of our mosquito surveillance and control operations. This allows us to keep detailed site information, track and schedule site visits based on differing variables, and produce weekly, monthly, and annual reports in a quick and efficient manner. Using commonly accessible software also allows us to provide you with your own data in an easily manipulative form for your own records.

3.7 OTTERTAIL'S REPORTS

OtterTail routinely provides its clients with on-going status reports specifically tailored for their projects including: weekly surveillance trap reports, larviciding activity reports, telephone call log reports, and monthly and annual summary reports.

3.8 OTTERTAIL'S QUALITY CONTROL AND ASSURANCE

OtterTail is a company that strives to provide products and services of the highest quality. To help accomplish this, we are dedicated to strong quality control and quality assurance (QA/QC) measures that encompass every facet of our programs. For instance, to ensure high quality field work, our crew leaders and staff supervisors conduct random spot checks of our field crew members throughout each season. This involves double checking their field assessments, data recording, and surveillance and treatment methods. This helps ensure that our field crew is performing high quality work with accurate results. We have similar QA/QC measures for other areas of our programs including our adulticiding, laboratory, and data entry components.

We also strive to find ways to do things better and add new and improved protocols as needed by learning from our past mistakes. For example, in 2009 we had several problems develop during one of our trap nights with a project that resulted in several errors that were largely due to a new field technician's mistakes. Rather than simply chalking this up as something that a single technician did wrong, OtterTail immediately took a look at the bigger picture to find ways we could prevent the same mistakes from happening again, as new technicians will always be part of mosquito work. We then developed and implemented new measures that improved all of our mosquito trapping and surveillance programs. These

new quality assurance protocols included developing and requiring the use of very detailed trap location guides to assure traps are always placed in the exact same location, trap set and pull forms to assure dry ice was in the proper amounts when set, fans were running, and that the nets are never mixed up between sites during transport to the lab.

While the likelihood of these problems is small, these forms virtually eliminate the chances of them occurring and give our staff an additional QA/QC check of any new technician.The client whose project that these original problems arose on was so impressed by OtterTail's quick response and thorough job of resolving the issues, that they continued using OtterTail for another contract term and then even wanted to contract with us for yet another term. By taking the opportunity to learn from our past mistakes, we have greatly improved all of our surveillance programs by minimizing the chance of errors in the field and reporting process to ensure that you are getting high quality services.

Not only do we have strict in-house QA/QC programs, but we have also satisfied and met the performance requirements of several of our client's own independent and robust QA/QC programs. For example, Adams, Boulder, and Jefferson Counties have had ongoing internal QA/QC components in their programs to help them evaluate their mosquito control contractor's performance, and we have constantly met or performed beyond their expectations, leading each of them to re-contract with us.

3.9 OTTERTAIL'S ENVIRONMENTAL VALUES

As our name implies, OtterTail Environmental is a biological consulting firm that has a strong belief in and commitment to environmental values since the founding of our company. We apply these beliefs across all of our programs and are constantly striving to find new methods and technologies to be as environmentally sensitive as possible, often while at the same time saving our clients costs.

For example, one of OtterTail's first projects as a company was to develop and manage the City of Boulder's mosquito control program. In 2003, Ottertail's president developed and implemented a complex program for the City during a contentious political climate where even larviciding had been prohibited. Many groups had segments of their constituency that were divided on the issue of treating for mosquitoes. There were some that wanted absolutely no mosquito control performed (due to its potential impact on the local environmental resources), some in the middle that only wanted to protect public health from WNV and help prevent epidemic outbreaks, and then some who simply wanted as much mosquito control as possible due to their nuisance, regardless of whether WNV was a factor. To compromise to both sides of the issue, he developed and implemented a unique "vector-only" city-wide larval control program that provides an effective protection against the threat of WNV to humans by focusing on the species that are most likely to transmit the disease rather than those that are simply a nuisance. This new methodology provided public health protection while also lessening the impact to the City's environmental resources and wetlands. This program was such a success that several other governments hired OtterTail to conduct similar programs for them (e.g., Jefferson County and Eagle County), and others even required their contractors to implement this type of vector-only approach.

OtterTail uses several environmentally sound practices and technologies including:

- We have fuel efficient hybrid vehicles for our non-truck portion of our fleet. We purchased our first one in 2004, long before the trend to try to "go green". We don't do it to be trendy or make points; we've done it since the company's inception as a philosophical belief.
- We have reduced our driving mileage and the impacts it has upon the environment by having the majority of our crew members meet directly in the field to save travel time to and from our office.
- We have used environmentally sensitive and least toxic mosquito control products such as *Bacillus thuringiensis israelensis* (*Bti*) since our company's inception and have expanded our use with several more of these types of products (e.g., *Bacillus sphaericus*, FourStar Briquets) and are constantly looking at and evaluating new environmentally sensitive products as they become available.
- OtterTail's entire fleet of ULV-equipped vehicles is enhanced with GPS variable flow pumps and sprayer control systems, ensuring that only the amount of product needed for proper mosquito control is being applied correctly.
- OtterTail has renovated its 26,000 square foot office building to increase its energy efficiency by installing new energy efficient widows, lighting, highly insulated siding, and HVAC systems.
- During the winter of 2014, OtterTail also installed solar panel technologies its office building (including solar roof panels and solar paneled carports) enabling it to become 100% solar powered.

3.10 OTTERTAIL'S CUSTOMER SATISFACTION AND QUALITY OF SERVICE

OtterTail takes pride in providing our clients with the highest service and products possible. We are a company that is highly flexible to our clients' needs and are constantly striving to continually improve each of our projects based upon your specific goals. OtterTail also makes each client a priority by having highly accessible project managers and senior level staff members available to respond to your needs at a moment's notice.

We also realize that when it comes to mosquito control, we have many more customers to satisfy than simply your organization's staff members. We often have thousands of residents to please as well. We ensure that we provide the best possible services by having a highly trained and knowledgeable field crew and office staff available for quick and courteous responses to each resident's issues and concerns.

3.11 OTTERTAIL'S LOCAL EXPERIENCE AND COORDINATION

OtterTail has worked directly for many counties and municipalities within the local area giving us the ability to understand both the political and practical needs that PLR could have. This experience will provide you with high quality development, planning and management of a comprehensive program that is tailored to meet your goals and objectives. We have worked with over 20 mosquito control clients, many cities and counties throughout Colorado, and we have conducted or are conducting WNV surveillance and/or mosquito control efforts for:

- Boulder County Mosquito Control District
- Paonia Mosquito Control District
- Adams County
- Jefferson County
- Eagle County
- Weld County
- City of Boulder
- City of Centennial
- City of Greenwood Village
- City of Fort Morgan
- City of Westminster
- City of City of Federal Heights
- Commerce City
- City of Lakewood
- City of Dacono
- City of Greeley
- Town of Castle Rock
- Town of Erie
- Town of Superior
- RTD, numerous HOA's and Metro districts

As part of these projects, OtterTail has had ongoing contact and coordination with the various County Health Departments, the Colorado Department of Health and Environment (CDPHE) and the Centers for Disease and Control (CDC) over the last several seasons.

While conducting complete mosquito management programs we have attended numerous meetings to help ensure that the most effective mosquito surveillance and control programs possible are being used to help minimize the threat of West Nile Virus (WNV) in the region. Part of our coordination efforts have included the processing of adult mosquito collections from various projects and submitting them to CPHE for arboviral testing and for those results to be included in the local, county and statewide WNV surveillance systems. We often engage in weekly discussions and meetings with individual project members and agencies during the mosquito season regarding sample submittals, area WNV infection rates, mosquito population trends and other mosquito surveillance and control related issues. OtterTail's past multi-agency coordination efforts ensure that Pelican Lake Ranch will continue to work together with local and regional agencies to reach the common mosquito control goals of the local areas and the Front Range region.

OtterTail also effectively and efficiently managed and operated the 2006-2015 mosquito services for Pelican Lake Ranch. This past experience will ensure a continued collaboration with Pelican Lake Ranch, resulting in the continuity of the project's management and ultimately a high quality end product.

3.12 OTTERTAIL'S ADDITIONAL ENVIRONMENTAL SERVICES

OtterTail doesn't just provide excellent mosquito control services. We are also a biological consulting firm with a staff of environmental specialists who provide many other services such as: research, baseline and feasibility studies, monitoring, permitting, environmental impact assessments and planning for many different types of projects that PLR or SDMS may need in the future. Some of our other specialties include:

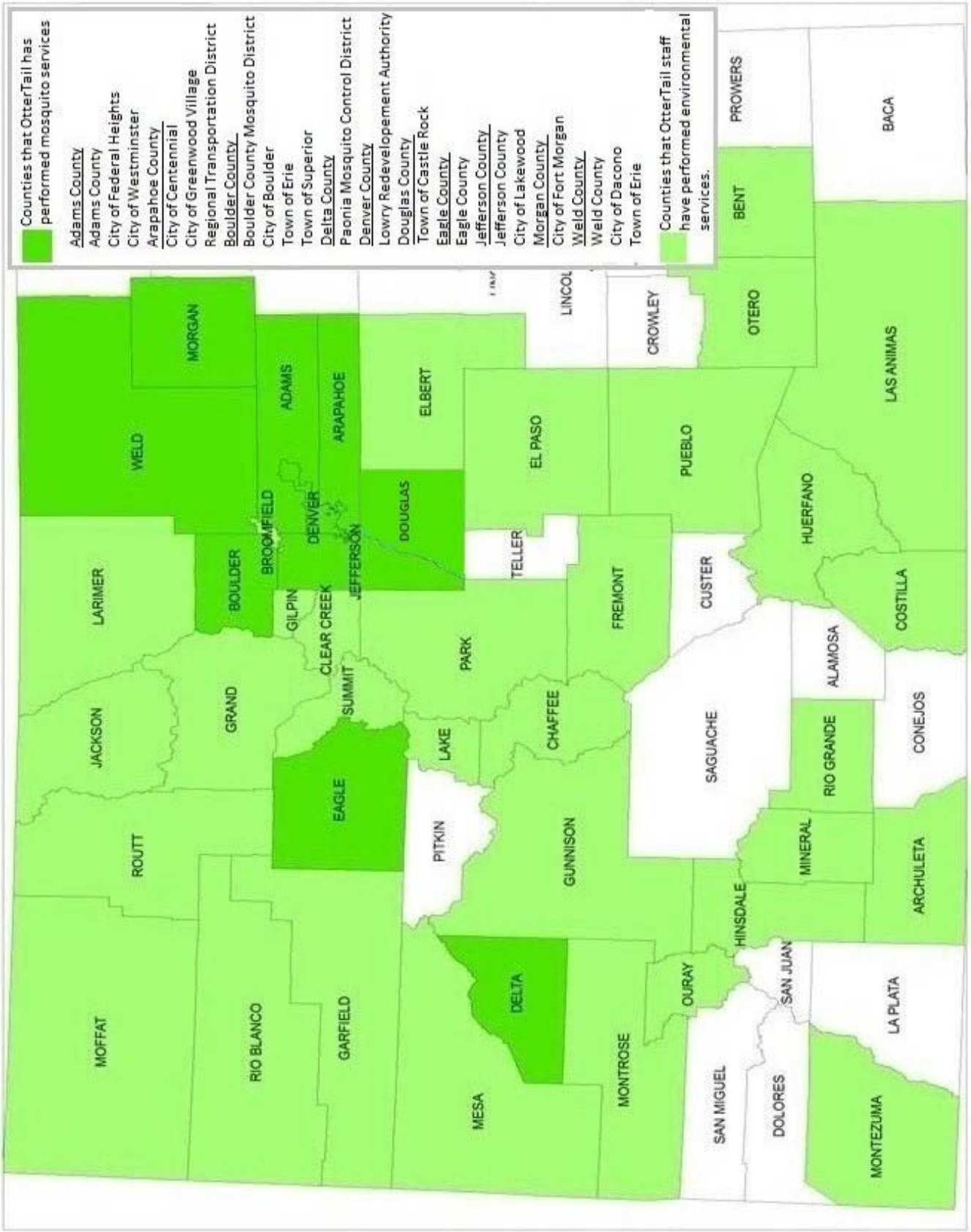
- Aquatic Biology/Entomology
- Stream Restoration
- Wildlife & Botany
- FERC Hydroelectric Licensing
- Hydrology/Water Quality
- Wetland Mapping/404 Permitting
- T&E Surveys/Section 7 Consultation
- NEPA/ Impact Assessment

O&G Wildlife Surveys, Weld County, CO

Helicopter Salmon and Electrofishing Surveys; AK

Lake Management; Boulder, CO

Chatfield State Park's T&E Plant Surveys; CO


Counties that OtterTail has performed mosquito services
Adams County
Adams County
City of Federal Heights
City of Westminster
Arapahoe County
City of Centennial
City of Greenwood Village
Regional Transportation District
Boulder County
Boulder County Mosquito District
City of Boulder
Town of Erie
Town of Superior
Delta County
Paonia Mosquito Control District
Denver County
Lowry Redevelopement Authority
Douglas County
Town of Castle Rock
Eagle County
Eagle County
Jefferson County
Jefferson County
City of Lakewood
Morgan County
City of Fort Morgan
Weld County
Weld County
City of Dacono
Town of Erie
Counties that OtterTail staff have performed environmental services.
WELD
MORGAN
ADAMS
ARAPAHOE
ELBERT
LINCOLN
CROWLEY
OTERO
BENT
PROWERS
BACA
LARIMER
BOULDER
BROOMFIELD
DENVER
JEFFERSON
DOUGLAS
EL PASO
PUEBLO
LAS ANIMAS
HUERFANO
COSTILLA
GILPIN
CLEAR CREEK
TELLER
FREMONT
CUSTER
ALAMOSA
CONEJOS
JACKSON
GRAND
SUMMIT
PARK
CHAFFEE
SAGUACHE
RIO GRANDE
ROUTT
EAGLE
LAKE
PITKIN
GUNNISON
MINERAL
ARCHULETA
MOFFAT
HINSDALE
SAN JUAN
LA PLATA
RIO BLANCO
GARFIELD
DELTA
OURAY
MONTROSE
MESA
SAN MIGUEL
DOLORES
MONTEZUMA
0 12.5 25 50 75 100
Miles
N
OtterTail Environmental
Colorado Counties Where OtterTail Staff Have Worked

3.13 OTTERTAIL'S QUALIFICATIONS OF KEY PERSONNEL

OtterTail is excited for the opportunity to provide the mosquito control services for PLR. We take pride in providing our clients with the highest service and products possible. We are a company that is highly flexible to our clients' needs and are constantly striving to improve each of our projects based upon your specific goals. As experienced mosquito specialists, we understand the time commitments needed for this program and have reserved the necessary availability of key personnel as well as support staff.

Furthermore, Mr. Fleming, the principal entomologist for OtterTail, is committed to this project, and, as OtterTail's owner and principal-in-charge, will ensure that this project will continue to be a top priority for his staff. OtterTail will provide you with highly accessible project managers and senior level staff members that are available to respond to your needs at a moment's notice. Our smaller company size provides quick responsiveness that larger firms simply cannot achieve due to the corporate structure. However, we are large enough that we have extensive resources in-house.

OtterTail's key personnel have broad backgrounds and unique skills in every area required for mosquito control services (e.g., IMM program development, planning, permitting, mapping, mosquito identification, health and safety, public outreach). We have conducted everything from county-wide mosquito control programs to small neighborhood HOA mosquito services. The majority of our permanent staff have experience conducting mosquito control surveys. We also have a large pool of seasonal mosquito control personnel, many of whom have worked for us for several years, have science degrees, and are experienced professionals.

Our primary mosquito identification experts all have several years of adult and larval mosquito species identification experience. Our key mosquito personnel have many years of experience working with mosquitoes and implementing large scale mosquito control programs as described below in more detail.

OtterTail does not knowingly employ or contract with illegal aliens to perform our work. OtterTail will certify participation the the E-Verify Program.

The following are narrative summaries of relevant qualifications and site-specific project experience of the key personnel that will be available for the project. More detailed descriptions of each individual's experience are available upon request.

Ed Fleming – Principal-in-Charge / Principal Entomologist

Mr. Fleming, the founder and owner of OtterTail, has over 25 years of experience in conducting and managing a variety of projects dealing with Integrated Mosquito Management, wetland habitat mapping, hydrology, aquatic biology, and aquatic entomology. Mr. Fleming has conducted aquatic biology and wetland studies on more than 100 streams and at least 50 water bodies within more than 25 states and South America. Specific to mosquito experience, Mr. Fleming has been involved with mosquito biology since the late 1980's.

Mr. Fleming started and implemented a complex program for the City of Boulder during a contentious political climate where even larviciding had been prohibited. To compromise to both sides of the issue, he developed and implemented a unique "vector-only" city-wide larval control program that provides an effective protection against the threat of WNV to humans by focusing on the species that are most likely to transmit the disease rather than those that simply are a nuisance. This program was such a success that several other governments hired OtterTail to conduct similar programs for them (e.g., Jefferson County

and Eagle County), and still others even required their contractors to implement this type of vector-only approach. This was all accomplished in 2003 during Colorado's WNV epidemic.

Joe Cox – Project Manager / Mosquito Control Specialist

Mr. Cox is a Mosquito Specialist with over 17 years experience working almost exclusively as an IMM specialist. He is a Qualified Supervisor in Colorado, and has supervised mosquito control efforts for most of his career. He is an expert mosquito entomologist, and has speciated innumerable light and gravid trap samples over the years. He also was in charge of a mosquitofish rearing and distribution program. He has expertise in Integrated Mosquito Management techniques including, but not limited to: assessment of aquatic habitats, macroinvertebrate sampling and identification, fish surveys, adult and larval mosquito species identification, mosquito surveillance and control, and program planning. He has extensive experience with the evaluation and management of West Nile Virus, and has successfully managed West Nile Virus mosquito monitoring and control programs in the State of Colorado. Mr. Cox has implemented, supervised and managed biological monitoring programs for various state and local agencies.

As the project manager, Mr. Cox would be the primary contact with the project's representative. Project communications would be directed to Mr. Cox, and he would attend relevant project meetings. He will be responsible for the supervision of the field activities, collection and analysis of data, training of personnel, and drafting reports.

Heidi Gerstung – Field Supervisor / Staff Scientist

Ms. Gerstung has over 13 years experience with several years of conducting and coordinating field projects involving mosquito identification, surveillance and control. Her work with Integrated Mosquito Management techniques has given her experience dealing with the evaluation and management of West Nile Virus. She is a Colorado Department of Agriculture certified Qualified Supervisor in Colorado and at OtterTail she has performed field crew coordinator and supervisor duties for several of our mosquito control projects. She has also performed field duties, data analysis and report writing for several of our mosquito management programs. Her responsibilities have included, but were not limited, to: crew coordination; field mapping and characterization of mosquito habitats for GIS analysis; identification of areas that warrant larval or adult treatment; conducting larval and adult mosquito surveillance; responding to citizen concerns; performing property investigations for potential mosquito habitat.

Various Field Technicians and Field Coordinators

OtterTail has a large pool of biological field technicians trained in mosquito surveillance and control techniques, mosquito species identification, and health and safety issues. This pool of technicians enables us to gear up for any workload needs we will have. OtterTail maintains a core group of full time mosquito specialists to assure consistent training of technicians and maintain continuity of the data collection, analysis, and presentation. Our seasonal field technicians meet the Colorado Department of Agriculture's training standards by attending our field and classroom training programs. In addition to the initial training programs, OtterTail's Qualified Supervisors also provide regular training updates throughout each season for all of our field crews.

OtterTail's Mosquito Control Technician Classroom Training

4.0 OTTERTAIL'S SCOPE OF WORK

4.1 LARVAL CONTROL SERVICES

As requested, we will conduct larval surveillance and control within the appropriate breeding sites within the project boundary identified on the map provided. Identified sites will be checked on a routine basis for all breeding areas at a frequency that will assure continuous control of the habitats, many on a weekly basis. Larval treatment quality control will be provided by performing spot-post-checks of previously treated areas after treatment.

All control materials used will be appropriate U.S. EPA registered products, applied at approved application rates, and will be subject to approval for use by Pelican Lake Ranch. After OtterTail has received the notice to proceed, we will begin the larval surveillance and control program at beginning of the next mosquito season and continue those services until the end of the mosquito season, but no later than September 30th of each year.

3.2 ADULT MOSQUITO CONTROL SERVICES

OtterTail will also conduct seasonal adult surveillance via CDC light traps in representative harborage habitats within the project area. All traps will be operated, as needed, from the beginning of each mosquito until the end of each mosquito season, but no later than September 30th of each year. After each trap night, OtterTail will collect and count all trapped mosquitoes. Population traps may be used to trigger adult control services and adult population results will be recorded and included in any routine reports. Samples may be submitted to CDPHE for virus testing.

Adult control may be performed, with prior Pelican Lake Ranch request and approval, within the contract area by performing harborage/barrier adulticide applications or general ULV adulticide applications. Any adulticide applications would be performed by using EPA registered products at approved application rates. Adulticiding services are at an additional cost.

4.2 WORK PRODUCTS

Any and all maps, reports, spreadsheets, databases, geographical information system (GIS) files, newsletters and other hard copy or electronic documents generated by OtterTail for this project shall be the property of Pelican Lake Ranch, who shall have sole and complete discretion regarding their use and distribution.

5.0 OTTERTAIL'S COSTS

5.1 2016 COSTS AND CONTRACT NOTICE TO PROCEED

Costs for the above scope of work for 2016 will be at the following not to exceed costs:

$11,725.

If necessary, adulticiding services would be conducted at an additional **$80** per linear mile (or **$350** minimum charge per application, whichever is greater).

All of the above costs include all labor, control materials, field equipment, and transportation costs. Your return (email and scan, or mail) of this page of this proposal with your signature below can serve as our contract to proceed with the work.

If you have any questions, or require any additional information, please contact Joe Cox at 303-858-8350 or at jcox@ottertail.us. We are looking forward to assisting you and appreciate this opportunity to provide a proposal for the required services.

Sincerely,

Ed Fleming

Ed Fleming

ACCEPTED:

FOR: **OtterTail Environmental, Inc.**

BY: Ed Fleming Date: 9-4-2015

Ed Fleming, President

FOR: **Special District Management Services, Inc / Beebe Draw Farms Authority**

BY:_____ Date:_____

Authorized Signature

5.2 2017 COSTS AND CONTRACT NOTICE TO PROCEED OPTION

If interested, OtterTail would be willing to enter into a 2017 contract for the same fee as 2016. We feel we can pass on the savings of not preparing annual proposals on to you. Costs for the scope of work identified in the September 4, 2015 proposal will be at the following not to exceed costs:

$11,725.

If necessary, adulticiding services would be conducted at an additional **$80** per linear mile (or **$350** minimum charge per application, whichever is greater).

All of the above costs include all labor, control materials, field equipment, and transportation costs. Your return (email and scan, or mail) of this page of this proposal with your signature below can serve as our contract to proceed with the work.

ACCEPTED:

FOR: **OtterTail Environmental, Inc.**

BY: Ed Fleming Date: 9-4-2015

Ed Fleming, President

FOR: **Special District Management Services, Inc / Beebe Draw Farms Authority**

BY:_____ Date:_____

Authorized Signature

5.3 2018 COSTS AND CONTRACT NOTICE TO PROCEED OPTION

If interested, OtterTail would be willing to enter into a 2018 contract for the same fee as 2016. We feel we can pass on the savings of not preparing annual proposals on to you. Costs for the scope of work identified in the September 4, 2015 proposal will be at the following not to exceed costs:

$11,725.

If necessary, adulticiding services would be conducted at an additional **$80** per linear mile (or **$350** minimum charge per application, whichever is greater).

All of the above costs include all labor, control materials, field equipment, and transportation costs. Your return (email and scan, or mail) of this page of this proposal with your signature below can serve as our contract to proceed with the work.

ACCEPTED:

FOR: **OtterTail Environmental, Inc.**

BY: Ed Fleming Date: 9-4-2015

Ed Fleming, President

FOR: **Special District Management Services, Inc / Beebe Draw Farms Authority**

BY:_____ Date:_____

Authorized Signature