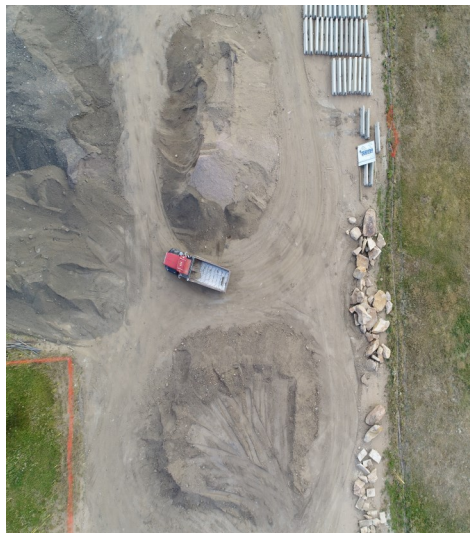




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## ENVIRONMENTAL SERVICES

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## 2DOT'S ENVIRONMENTAL SERVICES:

- Regulatory permitting
- Air quality permitting
- Wetland delineation/404 permitting
- Due diligence – ASTM Standards
- Phase I & II environmental site assessments – ASTM Standards
- Phase I & II ESA reporting – ASTM Standards
- Wildlife & avian surveys
- Pre/post-construction wildlife monitoring
- Remediation & cleanup
- Drone & GIS mapping
- SPCC plans
- Reclamation and Implementation
- Aerial inspections (with drones)
- ROW permitting and siting assessments
- NEPA & FERC permitting and compliance
- Public outreach
- Stormwater management (SWPPP, SWMP, BMPs)
- Fatal Flaw



## ENVIRONMENTAL PLANNING

*2DOT's staff are experts in environmental surveys and are cross-trained in many valuable disciplines that allow staff to perform multiple tasks in one field visit (i.e. a raptor survey and stormwater inspection). This represents 2DOT's dedication to our clients budget, time management, and efficiency.*



## APPROACH

Our approach relies heavily on project goals, budget, and schedule. Every step of the way, we will use our knowledge and technology to identify environmental liabilities and provide solutions. 2DOT's expert senior staff, with over 100 years of combined experience in environmental planning will provide the framework needed for the best-value solutions. Our junior staff are cross-trained and certified in many disciplines so that we can provide multiple options during fieldwork. In one field visit, we can complete a stormwater inspection, spray herbicides/pesticides, or conduct a wetland delineation. This allows better use of our staff, your budget, and increases efficiency.

## Working Relationships With:

- Bureau of Land Management
- Bureau of Reclamation
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- Farm Service Agency
- U.S. Army Corps of Engineers
- Colorado Parks and Wildlife
- Wyoming Game and Fish Department
- Utah Division of Wildlife
- WY, CO, & UT State Historic Preservation Office
- Local and County Governments

## Qualifications/Training:

- 2DOT biologists have over 100 years of combined wildlife experience and all have a minimum of a 4-year degree from an accredited university in the environmental field
- Certified Wildlife Biologists (CWB) from The Wildlife Society
- Expertise in Federal, State, and County Permitting & Regulations
- Section 10(a)(1)(A) USFWS Scientific Collection Permit
- Mexican Spotted Owl Survey Certification
- Yellow-billed Cuckoo Survey Certification
- SafeLand USA Training
- H2S Safety Training
- OSHA Safe Driving Training/Winter Travel
- MSHA New Minor Training
- Preble's Jumping Mouse Trapping

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## WETLANDS AND 404 PERMITTING

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## 2DOT's Wetlands and 404 Permitting Services:

- Clean Water Act Section 404 Permitting
- United States Army Corps of Engineers (USACE) Coordination
- Delineations of Waters of the United States (WOTUS)
- WOTUS Jurisdictional Determination Requests
- Permitting Strategy Development
- Nationwide Permit (NWP) Pre-construction Notifications
- Individual (Standard) Permit Applications
- Mitigation Planning and Implementation





**Regulatory** — 2DOT's regulatory specialists maintain a strong understanding of the USACE NWP program, rules on permit processing, definitions of waters of the U.S., and other aspects of the 404 program. Our understanding of NWP terms and conditions help us to advise our clients in project approaches that can best minimize permitting hurdles and even help to avoid impacts to waters of the U.S.



### Delineation of WOTUS

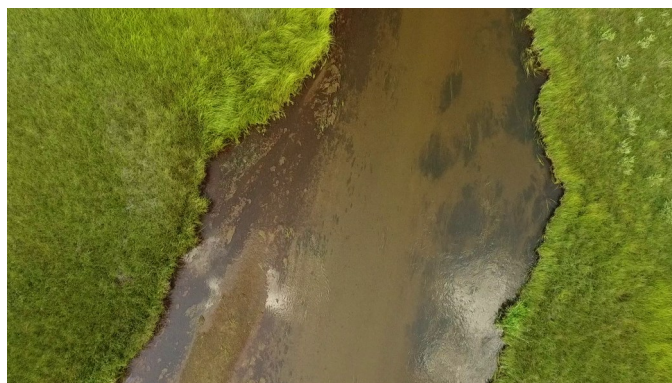
2DOT's biologists are expert wetland delineators. Our years of experience delineating wetlands and conducting vegetation surveys throughout the western U.S. provide us with the skills necessary to accurately delineate all types of wetlands, ensuring that your project will not be held up due to unanticipated USACE intervention. We have also delineated non-wetland waters of the U.S., from arroyos to ditches and urban stormwater management systems.

### USACE Coordination & Permit Processing

Our in-depth knowledge of Section 404 permitting helps us to work well with USACE staff, which can also allow NWP verifications to be processed quickly. We can “clean up” complicated permitting negotiations started by less experienced regulatory specialists.

### Mitigation Planning and Implementation

Our staff have designed and constructed numerous wetland and riparian mitigation projects in the west. 2DOT's staff is skilled and experienced at mitigation design, grading design, seeding, container stock design & procurement, soil amendments, logistics, construction management & supervision, and long-term vegetation monitoring.



## Wetland and 404 Permitting Experience:

- On-call contractor for delineations of WOTUS and 404 permitting requirements for CO, UT, and WY projects
- Federal Emergency Management Agency (FEMA) stream restoration project located near Estes Park, CO
- 35-mile pipeline project located in Casper, WY
- Pipeline removal project located near Kiowa, CO
- Reservoir restoration project located near Pinedale, WY
- WOTUS investigation and determination for proposed energy development in the Piceance and Uintah Basin, UT

## Qualifications:

- Wetland Training Institute 40-hour Wetland Delineation Training Certificate
- Soil Scientist Society of America Hydric Soils Workshop
- BLM Uintah Basin Rare Plant Surveyor Training
- Association of State Wetland Managers Active Member



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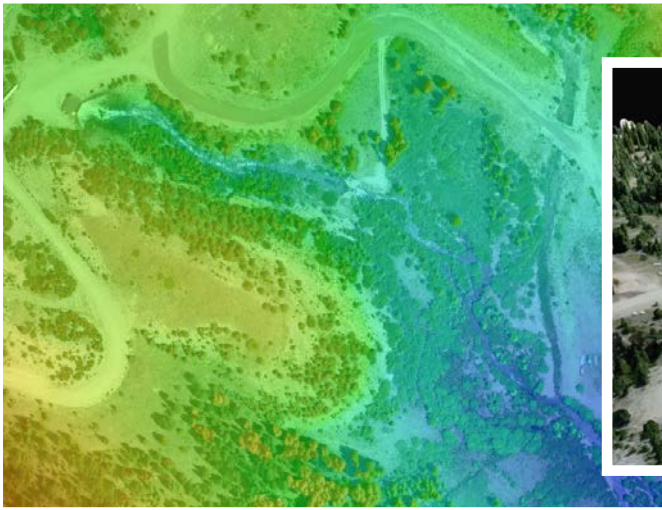
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## DRONE AND GIS SERVICES

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## Collect, Analyze, and Share Accurate Data

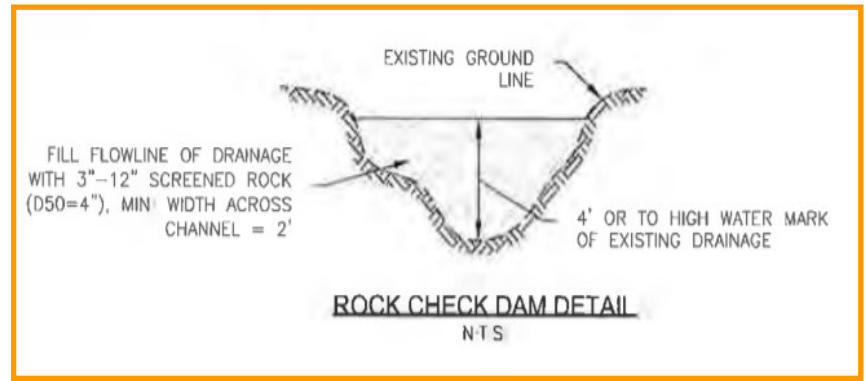
2DOT's UAV aerial imagery service has no minimum altitude, allowing aerial oblique or directly vertical perspectives that can satisfy most, if not all, imagery needs. Drones offer a cost and time effective solution to a wide variety of projects.

2DOT uses its UAV imagery to provide orthorectified, high resolution imagery and 20+ megapixel stills. UAV imagery integrated with GIS analysis can provide percent coverage, volume, and area calculations as well as georeferenced 2D maps and 3D models.

### 2DOT Drone and GIS Services:

- Reclamation Monitoring—Pre/Post Disturbance
- Wildlife and Raptor Surveys
- Land-Use/Land Cover/Vegetation Mapping
- Equipment Inspections
- Aerial Imagery (high resolution)
- 3D Modeling & Map Making
- Stormwater Management & Inspections
- Area & Volume Calculations
- Noxious Weed Mapping and Surveys
- Visual Surveillance & Monitoring
- Wetland Survey Mapping
- Phase I and II Site Assessments





## GIS Data Solutions

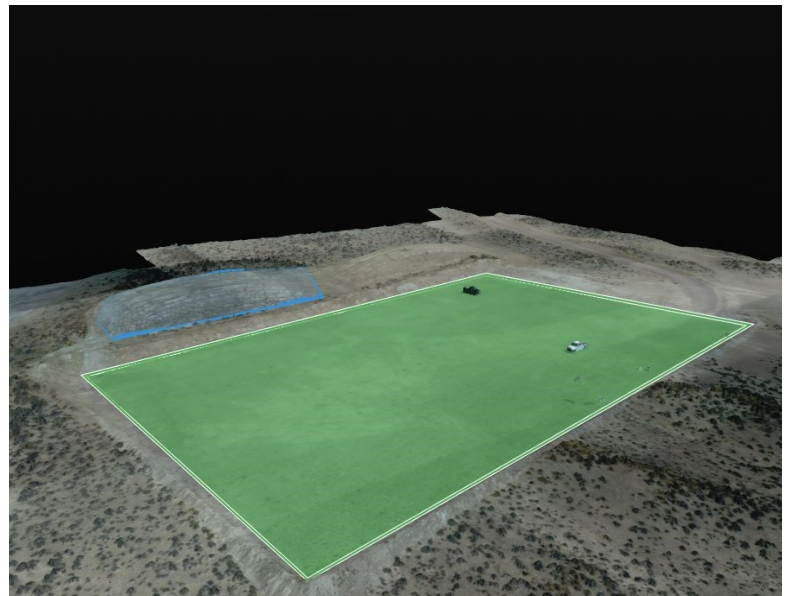
2DOT uses GIS to capture, store, manipulate, analyze, manage, and present all types of geographically-defined data and metadata. 2DOT incorporates a variety of processes to efficiently input new data, or migrate existing data, into our GIS Systems. Our staff has experience with the technologies and concepts that allow us to provide optimal solutions related to data integration, data analysis, mapping, and all facets of GIS application for every industry.

### Typical GIS Data Sources

- Aerial imagery with drones
- Field data collection
- GPS collection
- Data migration (GIS to CAD; CAD to GIS)
- Existing databases, maps, drawings and other documents
- Electronic maps and drawings

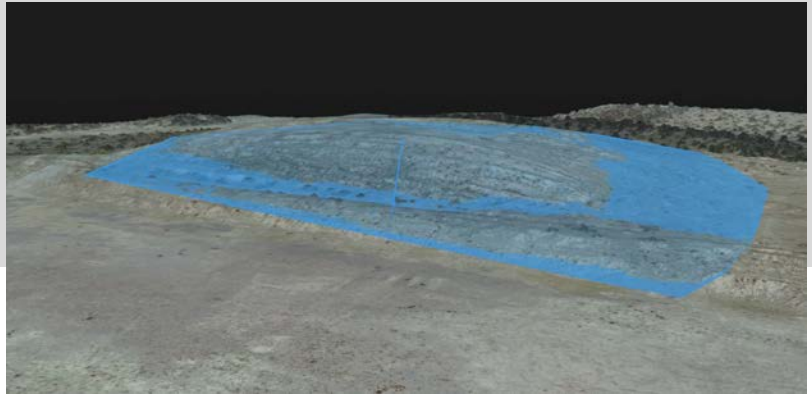
### Typical GIS Deliverables

- Wetland delineations
- Stormwater Management Plans
- Database design & system configuration
- Database maintenance & implementation
- Data conversion and migration
- As-built drawing & model development
- Map and alignment sheet generation
- Mapping services
- Pipeline and utility routing and design
- Pipeline regulatory compliance
- Right-of-way and easements



## UAV & GIS Project Experience:

- Pre and post-construction high quality aerial imagery for stream restoration
- Conservation easement baseline reports
- Stormwater regulatory inspections
- Reclamation progress on federal lands
- Stockpile soil volume and area calculations
- Website and marketing imagery
- Federally threatened, endangered, and sensitive species mapping
- Noxious and invasive weed mapping
- Wetland delineation reports
- Turnkey environmental regulatory compliance services
- Stormwater Pollution Prevention Plans (SWPPP)
- Stormwater Management Plans
- Database management for energy clients
- Georeferencing
- Wildlife habitat mapping



## Qualifications:

- Commercial Remote Pilot Small Unmanned Aircraft System (UAS) License (FAA Part 107 Registration)
- 4K and 20-megapixel capable commercial UAV
- General liability insurance up to \$1,000,000
- Geospatial Information Systems Professionals
- Software: ArcGIS, ERDAS Imagine, Pix4D, Drone Mapper

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