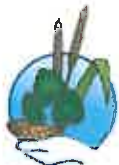


Crescent Sanitary District Wastewater System Improvement


Final Environmental Report

December 2015

Prepared for: Crescent Sanitary District
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 12/18/15

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1.0 Purpose and Need of Proposal

1.1 Project Description (Proposed Action)

The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, Oregon, with the potential for expansion to include the neighboring communities of Gilchrist and West Crescent. The design of the treatment facility is planned to accommodate the communities of Gilchrist and West Crescent should agreement be reached for their inclusion and it is assumed for this report that these areas are included. A vicinity map (Figure 1) is included in the Section 6.

The proposed treatment facility includes facultative lagoons, storage pond, chlorination facility, and land application of the reclaimed water. The proposed location of the facultative lagoons, storage ponds and land application area will be fenced to restrict access. There will be no discharge. The collection system is comprised of 8" minimum sewer main line and 4" lateral lines connecting to homes and businesses located within the rights of way of the streets and existing roadways. These lines collect and combine the sewer to one location where it can be pumped from a pump stations in Gilchrist and Crescent to the lagoons. Figure 2 in the Section 6.0 shows the location of the sanitation ponds, new collection lines and pumps stations, and does not include the existing collection system in the community of Gilchrist. Detailed information on the proposed activities can be found in Section 7 of the Engineering Report prepared by Anderson Engineering and Surveying, Inc.

1.2 Purpose and Need of the Proposal

The community of Crescent does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area.

The proposed project has the potential for expansion to include the communities of Gilchrist and West Crescent. The community of Gilchrist on the north boundary of the Crescent Sanitary District has an antiquated centralized sewer collection and treatment system installed prior to 1972.

The community of West Crescent also does not have centralized sewerage facilities and the residential properties are served with on-site septic systems. West Crescent has high ground water, shallow aquifers, and very permeable pumice sandy soils. The housing density in the West Crescent area is located close to the Little Deschutes River Basin's sensitive riparian and wetland areas.

Recent groundwater monitoring in Gilchrist showed nitrate levels exceeding the Environmental Protection Agency's (EPA) maximums and therefore, out of regulatory compliance. Additionally, increasing nitrate levels in the ground-water aquifer underlying the Central Oregon City of La Pine and the surrounding area (which includes Crescent, West Crescent, and the Gilchrist area) have been detected. Additionally, recent microorganism sampling showed high levels of total coliforms, including *Escherichia coli* (*E. coli*), in the Little Deschutes River. Samples collected near the outlet of the mill pond in Gilchrist had higher levels of total coliforms than downstream. This has large public health implications as this is the sole source of drinking water for area residents.

Furthermore, the concern is that nitrogen released from on-site septic systems may not only contaminate groundwater that supplies drinking water, but may migrate into the surface water, where nitrogen is known to decrease dissolved oxygen and have an adverse effect on pH levels in the river. This can cause increased algae plumes that remove oxygen needed by plants, fish, and animals to sustain a healthy eco-system.

This imminent public health threat and environmental concerns serve as the catalyst to proposed construction of a wastewater collection system and treatment facility for the Crescent Sanitary District and the surrounding communities of West Crescent and Gilchrist.

2.0 Alternatives to the Proposed Action

A detailed discussion of each of the options presented below can be found in Section 5 of the Engineering Report.

- **No Action:** The No Action alternative would leave sewage treatment in current state with on-site septic systems in Crescent and West Crescent and an out of compliance treatment facility in Gilchrist.
- **Alternative 1:** Alternative 1 would involve the construction of several smaller decentralized wastewater treatment centers to serve a small group or “clusters” of residential users and can vary from construction of aerobic tanks, larger underground septic systems or constructed treatment ponds depending on site conditions.
- **Alternative 2:** When on-site systems are not acceptable, wastewater must be collected for treatment at a centralized location. Alternative 2 explores 2 different categories of collection systems, conventional and alternative, to transport wastewater.
- **Alternative 3:** Alternative 3 explores 2 different treatment system options for sewage treatment at a centralized location. These options are a packaged treatment plant or facultative ponds.
- **Alternative 4:** Alternative 4 is the preferred alternative or proposed action described in Section 1. This alternative utilizes a conventional gravity sewer collection system and facultative pond system with storage and land application of effluent.

The costs associated with all alternatives and the selection factors for picking proposed action are presented in Section 6 of the Engineering Report.

Evidence of groundwater contamination with elevated levels of nitrates has been documented. Continued usage of on-site septic systems and drain fields or installation of new underground decentralized septic systems and drain fields does not address public health threats related to contaminated drinking water and environmental concerns. Therefore, the No Action Alternative and a portion of Alternative 1 are not viable options.

Above ground decentralized treatment ponds discussed in Alternate 1 require more space for treatment and disposal of effluent than the other alternatives, occur in close proximity to residential users, restrict future development in the service area and would be very expensive to maintain. Therefore, this is not a practical alternative and would have a greater area of impact than Alternative 4.

Conventional gravity sewer systems discussed in Alternative 2 work very well in cold weather, require less maintenance and have a longer life span than alternative collection systems, which would then

result in less environmental disturbance over time. Conventional systems are the most practical option and are part of Alternative 4.

Alternative 3 discusses facultative ponds versus packaged treatment plant which discharges treated water to a stream. It is highly unlikely given the nature of the environment of the Little Deschutes river basin, which provides habitat for many sensitive plants, fish and animals, that a NPDES permit would be obtained for this action. Therefore, facultative ponds are the best environmental option.

Based on this information and information found in the Engineering Report, Alternative 4 which utilizes a conventional gravity sewer collection system and a centralized facultative pond system with storage and land application of effluent is the reasonable alternative and will be analyzed further.

3.0 Affected Environment/Environmental Consequences

3.1 Land Use/Important Farmland/Formally Classified Lands

3.1.1 Affected Environment

Existing land use consists of R1-Rural Residential, RUC-I-Rural Community Industrial, RUC-C-Rural Community Commercial, and F-Forest (see Figure 3 in Section 6). All land use planning is under the jurisdiction of the Klamath County Planning Department. The proposed wastewater treatment site is zoned F-Forest. The Forest Zone completely surrounds the planning area which makes locating a treatment site in an area with different zoning virtually impossible.

The project area does not exhibit soils determined to be important farmlands by the Natural Resource Conservation Service soil survey.

The project area does contain not formally classified land, except for the tax lot immediately west of the proposed location of the treatment facility which is National Forest land. The project footprint does not cross National Forest Land.

3.1.2 Environmental Consequences

The residence and businesses of Crescent and potentially Gilchrist and West Crescent will be connected to this system addressing the issues of aging septic systems and contaminated groundwater.

The collection system for the sewerage throughout the planning area is allowed under the existing Rural Residential and Rural Community zones. However, per the Klamath County Comprehensive Land Use Plan, sewerage treatment is not an approved use in a Forest Zone. The proposed site will require additional effort to resolve the land use issue. However, as all the areas surrounding the project are zoned Forest, any other site selected would also require this process. An exception and re-zoning of the property will most likely be required. Given the lack of differently zoned land near the project area and the need for the system, the District has a strong case for approval of the re-zone. The land use issues have been discussed with the Klamath County Planning Department and the Department of Land Conservation and Development.

Alternative 4 does not affect areas determined to be important farmlands because none occur in the project area.

The project area is not formally classified land are within the project area.

Cumulative impacts on land use, important farmlands or formally classified lands due to the implementation of the proposed actions are not likely to occur as no other development projects are currently slated for the project area.

3.1.3 Mitigation

As there is no important farmland in the project area, there is no mitigation needed for impacts on important farmland.

The Klamath County Planning Department and the Department of Land Conservation and Development may require mitigation as a condition of granting their associated permits.

3.2 Floodplains

According to Flood Insurance Rate Map (FIRM; see Figure 4 in Section 6) produced in 1984 by the Federal Emergency Management Agency (FEMA), the proposed collection system, pump stations and treatment site are outside areas of 100-year flood (Zone A). All areas outside of Zone A are Zone C (areas of minimal flooding). No areas of 500-year flood are identified anywhere around Crescent, Gilchrist or West Crescent. There will be no adverse impacts to this resource and this resource will not be discussed further.

3.3 Wetlands

3.3.1 Affected Environment

The National Wetland Inventory (NWI) database shows wetlands along the Little Deschutes River corridor. See Figure 5 in Section 6. Collection system pipelines span a waterway along the Créscent Cutoff Road over the Little Deschutes River. No wetlands are identified near the proposed treatment site.

3.3.2 Environmental Consequences

The proposed project is not likely to have an effect on wetlands or waterways as all wetlands are avoided. Collection system pipelines will be installed in existing streets and utility corridor right-of ways within road embankments. These areas are already highly impacted, built up with fill, and are of higher elevation than their surroundings. The Crescent Cutoff Road crosses the Little Deschutes River via an existing bridge. The collection system pipes will be attached to the bridge spanning wetlands and waterways. The pipes placed within existing roadway alignments and embankments are not in wetland areas. Therefore, no jurisdictional delineations or concurrences are necessary for wetlands from State or Federal agencies.

Cumulative impacts on wetlands due the implementation of the proposed actions are not likely to occur as no other development projects are currently slated for the project area and this project is not likely to have an effect on wetlands.

3.3.3 Mitigation

No mitigation is required for wetlands, as the proposed project is not likely to have an effect on wetlands.

3.4 Historic Properties

3.4.1 Affected Environment

A review of the National Register of Historic Places and Oregon Historic Sites database indicates there are 4 historic sites in Crescent and 3 historic sites in Gilchrist, Oregon. Three of the 4 sites listed in Crescent search are within the project area. The 3 historic sites in Crescent are the Crescent School constructed in 1916, the Rouck Store constructed in 1919, and Bracken's Store constructed in 1911. The 3 historic sites in Gilchrist are multiple buildings (Gilchrist Mall, Theater and Mill Powerhouse) constructed in 1938-1939 by the Gilchrist Timber Company during development of the area. Copies of the results of database searches can be found in Appendix B.

The Klamath Tribes identify the project area as culturally significant.

3.4.2 Environmental Consequences

The proposed project is not likely to have an effect on known historic sites. Installation of the collection system will occur within previously developed streets and roads. No disturbance will occur to the buildings or structures. None of the historic places occur near the proposed treatment facility.

Cultural surveys will be performed to complete the Section 106 consultation process and a cultural monitor will be present during construction. Although the proposed project occurs in a culturally significant area, the footprint of the project follows existing road alignments and embankments and is highly disturbed; therefore, the likelihood of finding any prehistoric artifacts is extremely low.

Cumulative impacts on historic sites due to the implementation of the proposed actions are not likely to occur as no other development projects are currently slated for the project area and this project is not likely to have an effect on these sites.

3.4.3 Mitigation

No mitigation is required for historic places as the proposed project is not likely to have an effect on these sites.

3.5 Biological Resources

3.5.1 Affected Environment

Federal and State listed plant and animal species lists were reviewed to determine potential species of concern in the project (see Appendix B for copies of the database searches). The review showed that Oregon Department of Fish and Wildlife identified the areas as elk winter range. This review also identified that Oregon spotted frog (*Rana pretiosa*), a federally listed species, has proposed critical habitat along the Little Deschutes River corridor immediately adjacent to the project area. See Figure 6 in Section 6. A field visit on October 22, 2015 by Andréa Rabe of Rabe Consulting determined that habitat was not present in the project area for any State or Federal listed species.

The field visit on October 22, 2015 also confirmed that no noxious weeds are in evidence in the project area. The proposed site where the treatment facility will be located is disturbed from past logging activity. There are some young lodge pole pine present with bitterbrush, rabbitbrush, grasses and weedy species in the understory.

3.5.2 Environmental Consequences

There will likely be no effect on any Federal or State listed plant, fish or wildlife species, as none are known to occur and there is no habitat present for these species in the project area. Collection system pipelines will be installed in existing streets and utility corridors. These areas are already highly impacted. The proposed site for the treatment facility and pond is heavily disturbed. The areas was logged removing most of the lodge pole pine trees from the site and does not provide habitat for the species of concern and does not provide much thermal or hiding cover for big game.

The proposed treatment facility includes facultative lagoons, storage pond, chlorination facility, and land application of the reclaimed water. The land application of reclaimed water may be an attractant to wildlife in the area; however, these areas will be fenced to restrict wildlife access.

Proposed critical habitat for the Oregon spotted frog is located along the Little Deschutes River corridor, as shown in Figure 6 in Section 6, but the proposed project is not likely to have an effect on this critical habitat. The Crescent Cutoff Road crosses the proposed critical habitat via a bridge. The collection system pipes will be attached to the bridge, and placed within existing roadway alignments and will not adversely impact wetlands or proposed critical habitat. The treatment facility and pond are located on the east side of Highway 97 while the river is on the west side of the highway. The proposed pond construction is 1 mile east of the Little Deschutes River. Therefore, it is extremely unlikely that the created pond would be ever become occupied by Oregon spotted frogs in the future and will not be future habitat for the species.

No noxious weeds are currently in evidence in the project area. Existing vegetation will be disturbed in the project area footprint and removed where the facultative ponds will be constructed.

Cumulative impacts on State or Federal listed plant, animal, or fish species due the implementation of the proposed actions are not likely to occur as no other development projects are currently slated for the project area and this project is not likely to have an effect on these species or their associated habitat.

3.5.3 Mitigation

No mitigation is required for federally or State listed plant, fish or wildlife species, as the proposed project is not likely to have an effect on the species or their associated habitat.

Equipment and vehicles entering the area of project effect for implementation of proposed actions will be weed free of noxious weed matter and seeds, so as to not introduce noxious weeds to the project area. This may be accomplished by power washing vehicles and equipment prior to entering the project area.

After project implementation, vegetation in areas impacted by construction and staging area activities will be replanted and revegetated as needed. Project impact area will be seeded or stocked with transplants as needed to ensure are of project effect will not be left in bare soil condition or in a condition that would not recover vegetatively.

3.6 Water Quality Issues

3.6.1 Affected Environment

As was discussed in the Purpose and Need section of this report, the community of Crescent does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. Recent groundwater monitoring in Gilchrist showed nitrate levels exceeding the Environmental Protection Agency's (EPA) maximums. Increasing nitrate levels in the ground-water aquifer underlying the Central Oregon City of La Pine and the surrounding area (which includes Crescent and the Gilchrist area) have been detected from contamination of residential septic systems. Additionally, recent microorganism sampling showed high levels of total coliforms, including *Escherichia coli* (*E. coli*), in the Little Deschutes River. Samples collected on October 21, 2015, near the outlet of the mill pond in Gilchrist had higher levels of total coliforms than downstream. This has large public health implications as this is the sole source of drinking water for area residents. Copies of the water sample laboratory analyses are included in Appendix B.

This also has environmental implications. The communities of Crescent, Gilchrist and West Crescent are located close to the Little Deschutes River Basin's sensitive riparian and wetland areas. Nitrogen released from on-site septic systems may not only contaminate groundwater that supplies drinking water, but may migrate into the surface water, where nitrogen is known to decrease dissolved oxygen and have an adverse effect on pH levels in the river. This can cause increased algae plumes that remove oxygen needed by plants, fish, and animals to sustain a healthy eco-system.

3.6.2 Environmental Consequences

The immediate environmental consequences include a very slight possibility of sediment loading into the Little Deschutes River in places where the project installation of the collection system occurs immediately adjacent to the riparian area. The river is downslope of the project and sediment leaving the construction site could reach the river. The only possible impacts will be during and immediately after construction. Once construction is completed, no additional sediment loading will be likely to occur due to the project.

The proposed project will improve water quality in the long-term. By creating a collection system and transporting sewage and wastewater to the proposed treatment facility and properly treating it, nitrates will no longer be deposited through aging septic systems into the groundwater. This addresses both public health and environmental concerns.

No other projects are planned in the general vicinity of this project in the immediate future, so there will be no cumulative effects in the area from this or other projects.

3.6.3 Mitigation

Best management practices for sediment and erosion control will be implemented during and immediately after construction to reduce and possibly eliminate the likelihood that sediment loading will occur. These best management practices may include, but are not limited to, sediment fencing, straw bale placement, and reseeding or vegetating. The best management practices will be implemented on an as-needed basis. On-going visual inspection during the construction phase will be used to determine when the practices are needed.

3.7 Coastal Resources

The proposed project is not in a coastal resource area and will therefore not affect a coastal resource. This resource will not be discussed further.

3.8 Socio-Economic/Environmental Justice Issues

3.8.1 Affected Environment

Existing land use consists of R1-Rural Residential, RUC-I-Rural Community Industrial, RUC-C-Rural Community Commercial, and F-Forest (see Figure 3 in Section 6). All land use planning is under the jurisdiction of the Klamath County Planning Department. Gilchrist, West Crescent, and Crescent do not have an urban growth boundary as they are unincorporated communities. The proposed wastewater treatment site is zoned F-Forest, and given this zoning, the sewage treatment facility will not convert existing farm ground or directly increase the number of residences within the area.

This project is not located in an exclusively low-income community. Some of the residences are lower income households, whereas some of the households are middle class families.

3.8.2 Environmental Consequences

This project will have a beneficial impact on the socio-economics of the communities of Crescent, West Crescent and Gilchrist. Currently, there is increasing concern over nitrate and high levels of total coliforms, including *Escherichia coli* (*E. coli*), contamination from the aging septic systems in the area and non-compliance of the Gilchrist centralized collection and treatment system. These concerns have made it extremely difficult for any new development to occur in the area. The proposed wastewater improvements will reduce groundwater contamination and allow new business and residential development.

Additionally, increasing nitrate levels in the ground-water aquifer underlying the Central Oregon City of La Pine and the surrounding area (which includes Crescent and the Gilchrist area) have been detected from contamination of residential septic systems. This has large public health implications as this is the sole source of drinking water for area residents. The proposed project will address this issue and bring the community of Gilchrist in compliance with current environmental standards and regulations.

Cumulative impacts due to implementation of proposed activities are not likely to occur as no other development projects are currently slated for the project area and project will have a beneficial impact on the socio-economic status of the project area.

3.8.3 Mitigation

Post-construction cleanup will be conducted within the project area of effect. All construction debris and excess materials will be removed from the site. As needed, the area will be revegetated where vegetation was disturbed as a result of the project.

3.9 Miscellaneous Issues

3.9.1 Affected Environment

The project area is not a Class I area for air quality. The EPA lists the area in the 3rd percentile for Particulate Matter diameter less than 2.5 micrometers (PM2.5).

The project area is not near or adjacent airports or navigable waterways.

The project proposes to install collection system pipes along or in road and streets within Crescent, West Crescent and Gilchrist and in the utility corridor right-of way along U.S. Highway 97. Some the roads in Gilchrist, Crescent and West Crescent are unpaved. The proposed project also builds an access road that crosses the inactive railroad line east of the highway.

The highway and the logging mills in Crescent and Gilchrist contribute to the ambient noise levels in the project area. There is little noise from commercial businesses or residences in the area.

3.9.2 Environmental Consequences

Air quality during construction may be slightly degraded due to dust creation from dirt moving activities and vehicle travel on unpaved roads.

All roads proposed for collection system installation or upgrade will see increased traffic temporarily during construction activities. This may cause some temporary delays for or rerouting to residential or business access points.

Noise levels in the area of the project effect will be increased temporarily due to construction activities. There will likely be no increase in noise levels after construction is complete.

Cumulative impacts to air quality, transportation, or noise due to implementation of proposed activities are not likely to occur as no other development projects area currently slated for the project area.

3.9.3 Mitigation

To decrease dust from construction activities, unpaved roads will be watered as needed. Excavation spoils will be covered in the event of high winds or storm activities to reduce dust and soil transport away from the project site. Revegetating disturbed soils, as needed, after implementation of proposed actions will reduce sediment and dust movement after project completion.

To reduce the impact of construction traffic and noise on residential areas, construction will not occur on the weekends or in the evenings. Weekends and evenings are when the most residents would be at home, and therefore disturbed by the activities.

4.0 Summary of Mitigation

The mitigation activities in Table 1 will be implemented during construction of the proposed actions. These mitigation activities will mitigate potential impacts of the proposed actions. With the implementation of these mitigations activities, the proposed actions will not likely have a significant impact on the environment within the area of project effects.

The area of proposed project impact will be monitored and visually inspected at frequent intervals during project implementation. The mitigation activities will be assessed for their effectiveness. If the proposed mitigation activities are not adequate to offset project impacts, then mitigation activities will be modified or adjusted to compensate for the project impacts. Additional best management practices will be implemented as needed to eliminate project impacts on the project effect.

1.	Equipment and vehicles entering the area of project effect for implementation of proposed actions will be weed free of noxious weed matter and seeds.
2.	After project implementation, vegetation in areas impacted by construction and staging area activities will be replanted and revegetated as needed.
3.	Sediment and erosion control will be implemented during and immediately after construction. These best management practices may include, but are not limited to, sediment fencing, straw bale placement, and reseeding or vegetating, as needed.
4.	Unpaved roads will be watered as needed.
5.	Excavation spoils will be covered in the event of high winds or storm activities to reduce dust and soil transport away from the project site.
6.	Construction activities that produce noise will not occur on the weekends or in the evenings.
7.	Monitoring and visual inspection of mitigation and construction activities will occur at frequent intervals during project implementation.
8.	Post-construction cleanup will be conducted within the project area of effect. All construction debris and excess materials will be removed from the site.

5.0 Correspondence

Correspondence was conducted with a number of State and Federal agencies and Tribes to gather information and for concurrence purposes. Letters dated October 6, 2015, were sent to the following entities: U.S. Army Corps of Engineers (ACOE), Bureau of Land Management (BLM) – Prineville Office, U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service – Deschutes National Forest, Portland State University, Klamath County Planning Department, Oregon State Historic Preservation Office, Burns Paiute Tribe, The Klamath Tribe, and Confederated Tribes of Warm Springs. Copies of the letter sent can be found in Appendix A.

Two responses were received within the 30-day comment period, one from Prineville District BLM and one from the Deschutes National Forest. Both letters acknowledge receipt of the proposed project description and neither agency expressed any concerns about the project. Copies of these responses can be found in Appendix A.

After the 30-day comment period closed, contact was made with ACOE, Oregon Department of State Lands, and via email USFWS and The Klamath Tribes was contacted via phone. Table 2 below summarizes all correspondence.

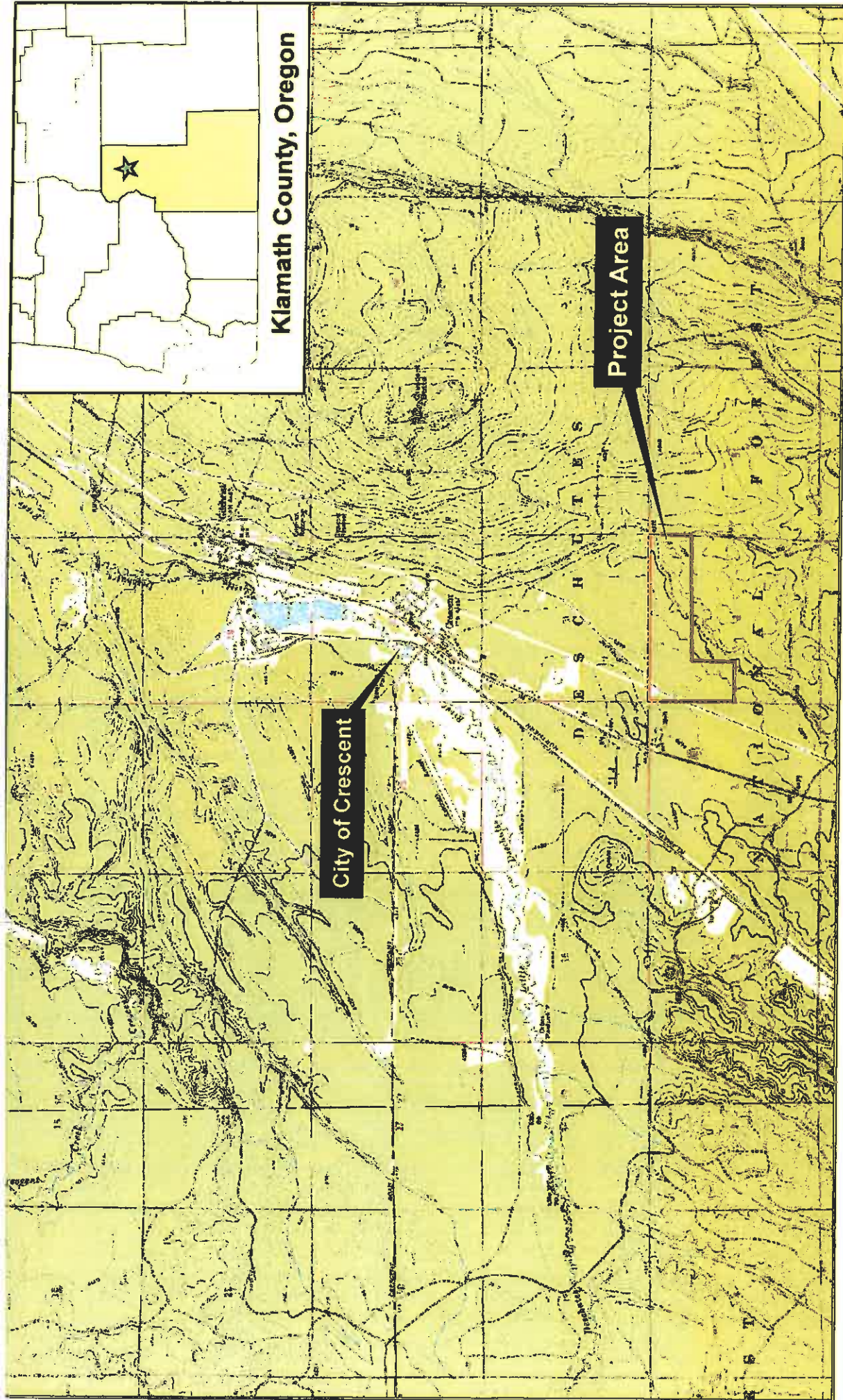
Letters were not sent to a number of State and Federal agencies. These agencies were not contacted because their respective agency websites revealed that the project area was not within an area of concern or listed species of concern and their associated habitat was found in the project area. Therefore, it was not necessary to contact these agencies for a response. The list of agencies not contacted and supporting rationale is also listed in Table 2 below. The results of database searches and supporting documentation can be found is included in Appendix B.

Agency/Entity Contacted	Correspondence Method and Date of Initial Contact	Method and Date of Correspondence Received	Issues Identified during Correspondence	Resolution of Issues
U.S. Army Corps of Engineers (ACOE)	Letter – 10/6/2015 Follow up email – 12/1/2015	Email – 12/2/2015	Utility work through wetlands/waterways may be authorized through Nationwide Permit	Proposed project does not affect wetlands or waterway, no permit is necessary
Oregon Department of State Lands	Email – 12/17/2015	Email - 12/18/2015	Offsite Wetland Determination Request	Offsite request not given. No DSL concurrence needed, no permit is necessary as all wetlands are avoided
BLM Bureau of Land Management (BLM) – Prineville Office	Letter – 10/6/2015	Email – 10/30/2015	No concerns given the project does not occur on BLM Land	NA
U.S. Forest Service – Deschutes National Forest	Letter – 10/6/2015	Letter – 10/27/2015	No concerns given the project does not occur on National Forest Land	NA
U.S. Fish and Wildlife Service (USFWS)	Letter – 10/6/2015 Follow up email – 12/7/2015	Email response received – 12/7/2015	<ol style="list-style-type: none"> 1. Mislabeled Oregon spotted frog (OSF) critical habitat 2. Requested more information on location of pond in proximity to the river to address future establishment of OSF population 3. Concern about ESA Section 7 consultation with USFS for special use permit 	<ol style="list-style-type: none"> 1. Text corrected in ER 2. Text updated pond is 1-mile away from river with highway between pond and river, no likelihood of OSF in pond in the future 3. No section 7 consultation necessary with USFS, access obtained through private land
Oregon Department of Fish and Wildlife (ODFW)		Phone – 12/11/2015	Formal comments made during Klamath County planning process, concern about wildlife attraction to irrigated areas, loss of big game habitat and public access	ODFWs comments will be address during planning process, Proposal is to fence irrigated areas so not a problem for wildlife attraction

Oregon Department of Transportation (ODOT)	Email – 12/14/2015	Final response via email – 12/18/2015	ODOT requests a meeting regarding boring under Highway 97	ODOT response is that any crossings of the highway would need to be bored and no pipe parallel to the centerline could be placed under the paved portion of the highway.
Oregon State Historic Preservation Office (SHPO)	Letter – 10/6/2015	No response received		The Klamath Tribes identified the area as culturally significant and require cultural surveys. Section 106 consultation will occur with SHPO as cultural surveys are completed.
The Klamath Tribe	Letter – 10/6/2015	Phone - 12/9/2015	Project area culturally significant and requires cultural survey and monitor present during construction	ER updated to include cultural significance to Klamath Tribes, need for survey and monitor present during construction
Burns Paiute Tribe	Letter – 10/6/2015	No response received	NA	NA
Confederated Tribes of Warm Springs	Letter – 10/6/2015	No response received	NA	NA
Portland State University	Letter – 10/6/2015	No response received	NA	NA
Klamath County Planning Department	Letter – 10/6/2015	No response received	NA	Will work with planning department during permit process
List of Agencies letters were not sent to and rationale (see supporting documentation in Appendix B)				
Oregon Department of Agriculture	NA	NA	NA	Record search revealed no listed plant species in or near project area
National Marine Fisheries Service	NA	NA	NA	Record search revealed no listed anadromous fish species in or near project area
Federal Aviation Administration	NA	NA	NA	Record search revealed no airports in or near project area
National Park Service	NA	NA	NA	No formally designated land or national parks within 50 miles of the project area

Natural Resources Conservation Service	NA	NA	NA	No important farmlands within project area
U.S. Environmental Protection Agency	NA	NA	NA	No sole source aquifers in or near project area

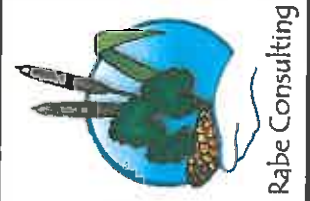
6.0 Exhibits/Maps



**Crescent Sanitary District
Wastewater System Improvements**

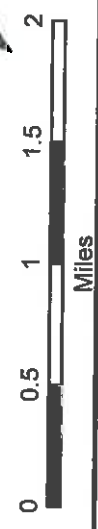
Figure 1 - Vicinity and Project Area Location Map

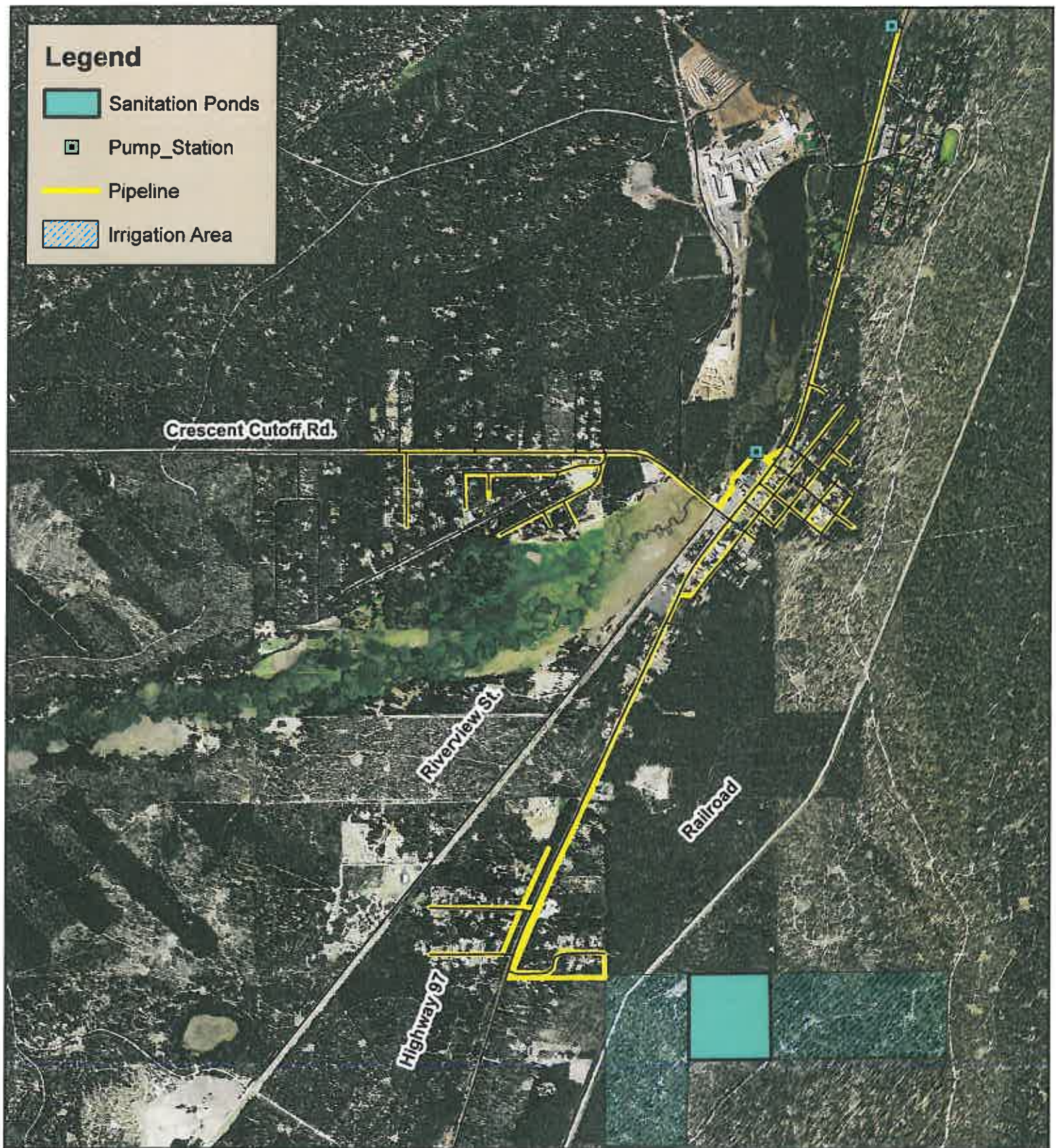
Map Created By: Ruth Olsen
Map Created On: October 16, 2015



Rabe Consulting

Township 25S Range 9E Section 6
Tax lot # 200





**Crescent Sanitary District
Wastewater System Improvements**

Figure 2 - Infrastructure Site Map

Map Created By: Ruth Olsen
Map Created On: October 16, 2015



Rabe Consulting

N



0 0.25 0.5 0.75



Miles

Figure 3 – Land Use Zoning in Project Planning Area

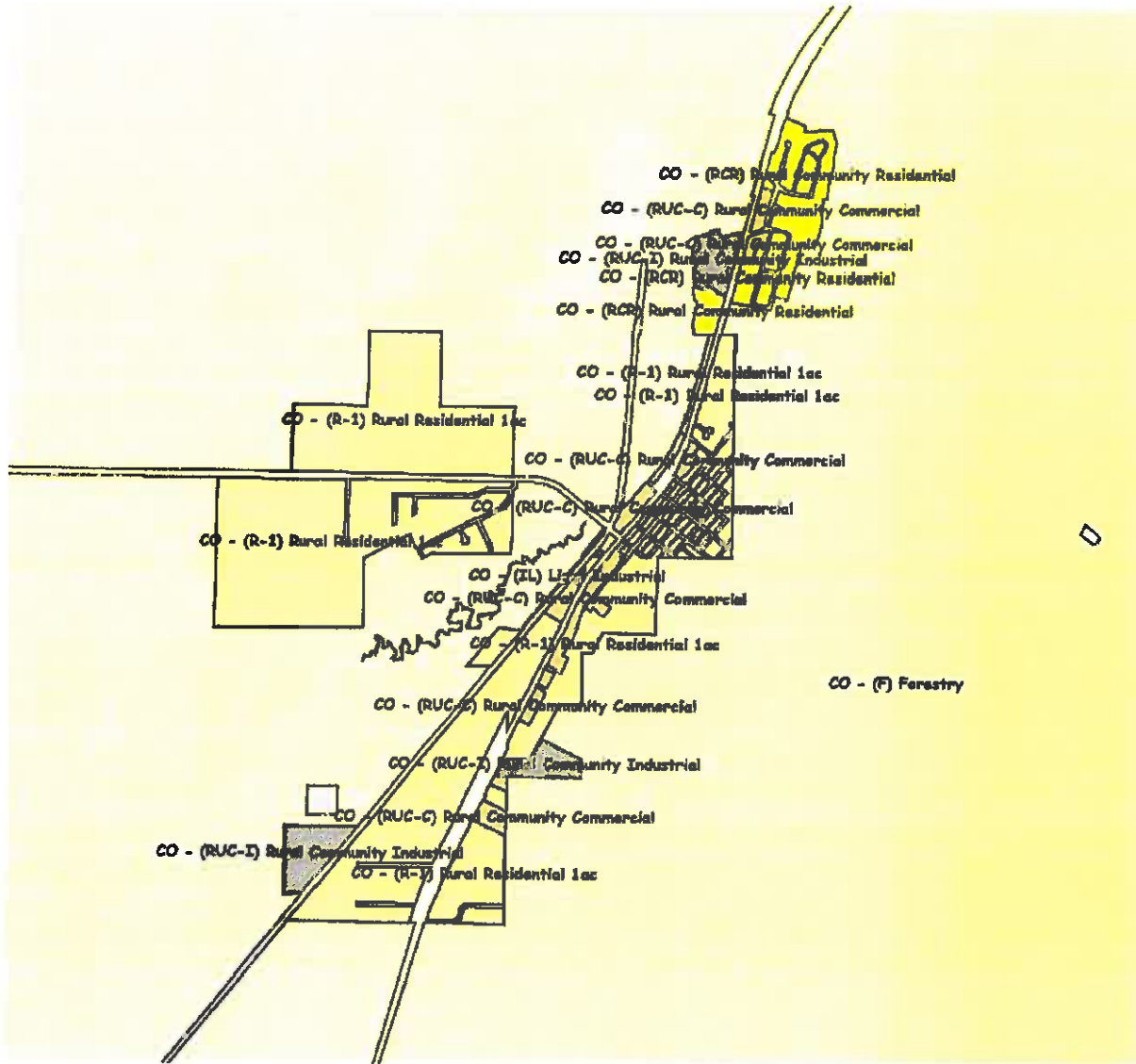
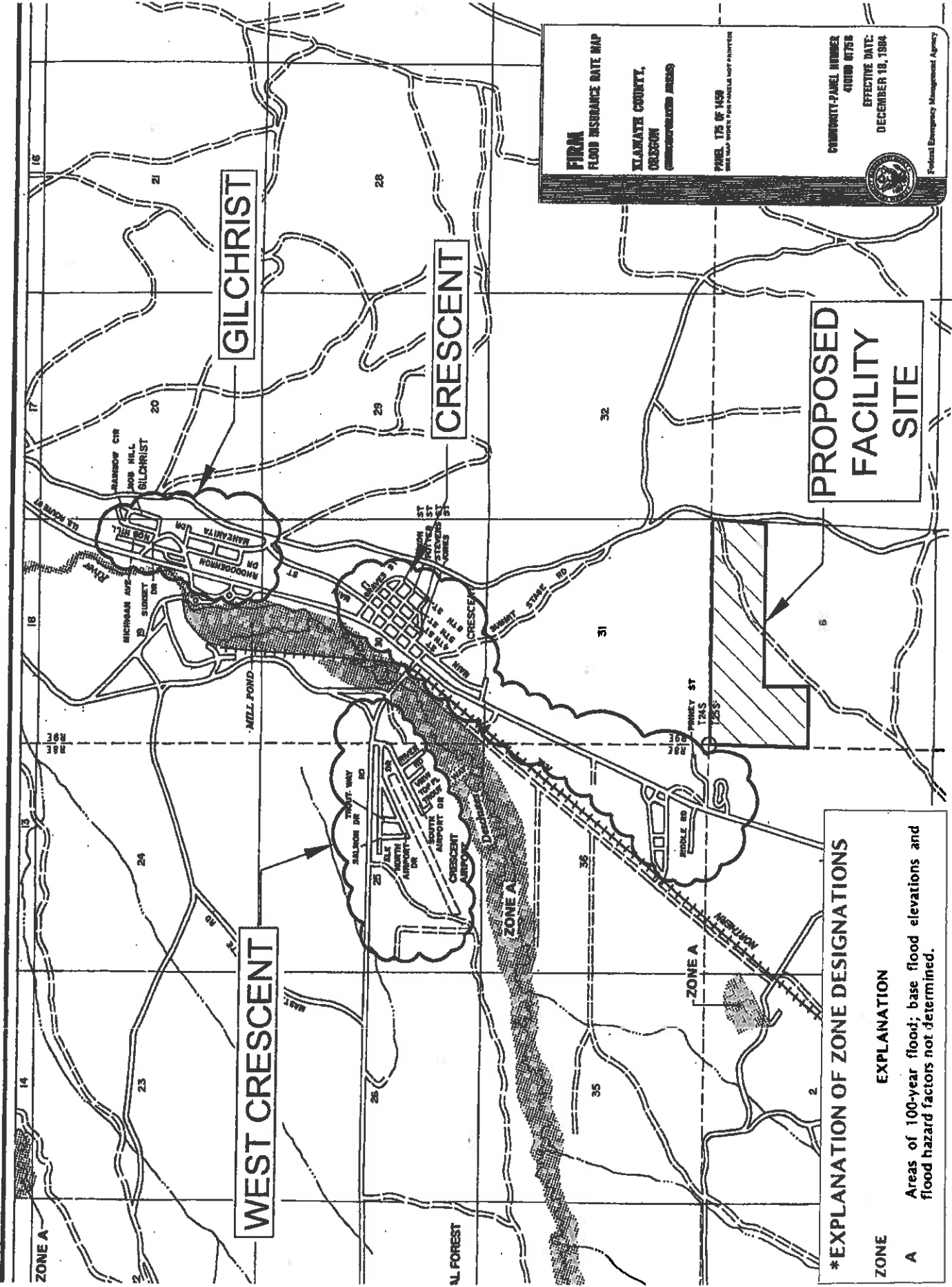
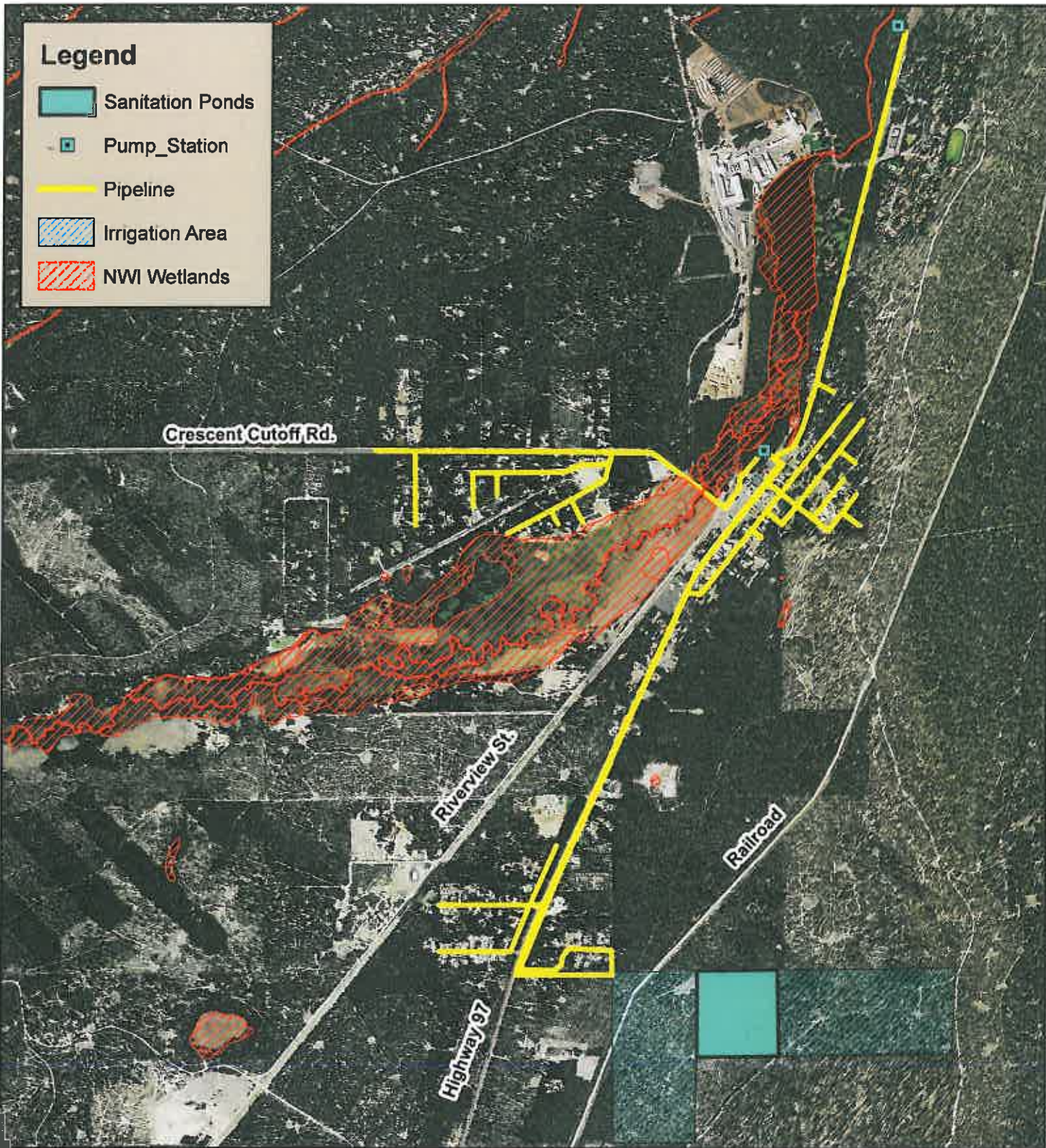


Figure 4



***EXPLANATION OF ZONE DESIGNATIONS**

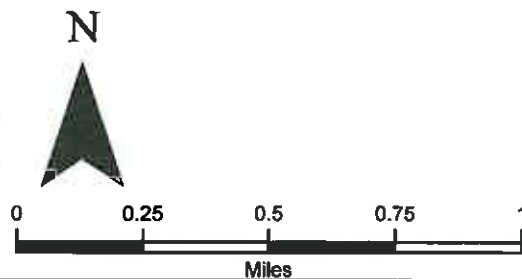
ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.

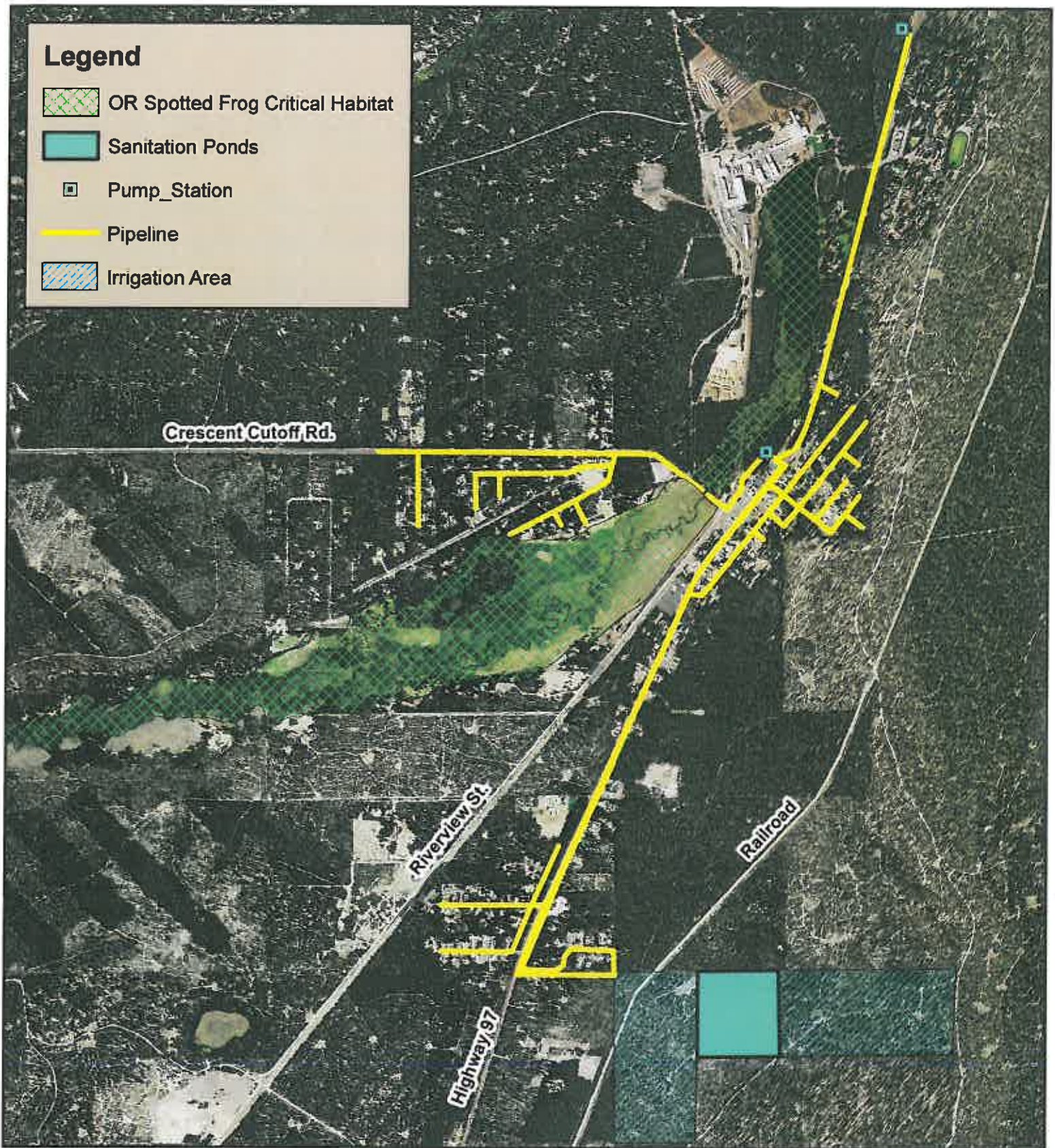


**Crescent Sanitary District
Wastewater System Improvements**

Figure 5 - Wetlands Map

Map Created By: Ruth Olsen
Map Created On: October 16, 2015

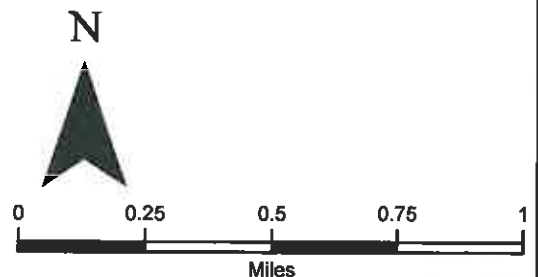




**Crescent Sanitary District
Wastewater System Improvements**

Figure 6 - Sensitive Species Map

Map Created By: Ruth Olsen
Map Created On: October 16, 2015



APPENDIX A – CORRESPONDENCE SENT AND RECEIVED

Trisha Roninger

From: Quigley Karen M <karen.m.quigley@state.or.us>
Sent: Monday, October 19, 2015 1:41 PM
To: Trisha Roninger
Subject: RE: Inquiry regarding Crescent and Gilchrist, Oregon

Hi Trisha,

Thanks for your patience.

Please touch base with 3 Tribes to see what information about the project they may be interested in:

Perry Chocktoot, the Klamath Tribes perry.chocktoot@klamathtribes.com

Holly Shea, Warm Springs, holly.shea@ctwsbnr.org

And Diane Teeman, Burns Paiute Tribe, dteeman.burnspaiute@gmail.com

FYI, most tribal contacts have indicated a preference to receive communication via email. You are more than welcome to follow-up with a phone call.

I recommend suggesting a date that you hope to hear from them (if you have a deadline) and then you can make the phone call at that point to double-check.

Regards,

Karen

Karen Quigley, Executive Director
karen.m.quigley@state.or.us



Legislative Commission on Indian Services



ANDERSON ENGINEERING AND SURVEYING, INC.

PROFESSIONAL ENGINEERS AND LAND SURVEYORS

17881 Hwy. 395, Lakeview, Oregon 97630

(541) 947-4407 Fax (541) 947-2321

www.andersonengineering.com

October 6, 2015

Shelly Hanson, Specialist
U.S. Army Corps of Engineers
Eugene Field Office
211 E 7th Avenue, Suite 105
Eugene, Oregon 97401-2722

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Ms. Hanson;

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

The project will consist of installing collection piping in the Crescent area as well as constructing a treatment facility that will include treatment and storage lagoons and a chlorination facility. Once treated, the water will be used for crop irrigation on two 80-acre sites. The attached maps show the area of potential effect for all construction activities.

The Crescent Sanitary District requests your comments regarding any potential impacts for the project.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,

Darryl Anderson, PE, PLS

cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
Site Map



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October 6, 2015

Carol Benkosky, District Manager
Bureau of Land Management – Prineville Office
3050 NE 3rd Street
Prineville, OR 97754

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Ms. Benkosky;

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

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As shown on the site map, construction may take place in the Deschutes Resource Area. We are seeking information on environmental effects from the project as an input to the Rural Utilities Service's decision-making process. We request your review of this project for potential impacts to officially designated areas within the Deschutes Resource Area and any recommendations you may have to mitigate or avoid these effects. We would also appreciate receiving any information regarding additional review requirements that your agency may have.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,



Darryl Anderson, PE, PLS

cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
 Site Map



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(541) 947-4407 Fax (541) 947-2321
www.andersonengineering.com

October 6, 2015

Diane Teeman
Burns Paiute Tribe
100 Pa'Si 'Go' Street
Burns, OR 97720

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Ms. Teeman;

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

The project will consist of installing collection piping in the Crescent area as well as constructing a treatment facility that will include treatment and storage lagoons and a chlorination facility. Once treated, the water will be used for crop irrigation on two 80-acre areas. The attached maps show the area of potential effect for all construction activities.

The Crescent Sanitary District requests the assistance of the Burns Paiute Tribe in identifying areas of cultural significance that may be affected by the project. Please provide any recommendations you may have to mitigate or avoid any potential impacts.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,


Darryl Anderson, PE, PLS

cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
Site Map



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(541) 947-4407 Fax (541) 947-2321

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October 6, 2015

Mark Gallagher, Planning Director
Klamath County Planning Department
305 Main Street
Klamath Falls, OR 97601

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Mr. Gallagher;

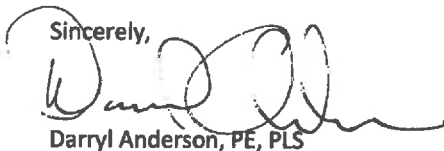
The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

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The Crescent Sanitary District requests your comments regarding any potential land use impacts for the project.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,



Darryl Anderson, PE, PLS

cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
Site Map



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www.andersonengineering.com

October 6, 2015

Perry Chocktoot
Klamath Tribes
PO Box 436
Chiloquin, OR 97624

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Mr. Chocktoot;

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

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The Crescent Sanitary District requests the assistance of the Klamath Tribes in identifying areas of cultural significance that may be affected by the project. Please provide any recommendations you may have to mitigate or avoid any potential impacts.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,

Darryl Anderson, PE, PLS

Cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
Site Map



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October 6, 2015

Lindsey Wise, Biodiversity Data Manager
Portland State University
Oregon Biodiversity Information Center Institute for Natural Resources
PO Box 751
Portland, Oregon 97207

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Ms. Wise;

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

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The Crescent Sanitary District requests your comments regarding any potential impacts for the project.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,


Darryl Anderson, PE, PLS

cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
Site Map



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www.andersonengineering.com

October 6, 2015

Dennis Griffin, State Archaeologist
Oregon State Historic Preservation Office
725 Summer Street NE, Suite C
Salem, OR 97301

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Mr. Griffin;

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

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The Crescent Sanitary District requests the assistance of your office in identifying historic properties that are listed or eligible for listing on the national Register of Historic Places and that may be affected by the project. Please provide any recommendations you may have to mitigate or avoid these impacts to properties that may be affected.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,


Darryl Anderson, PE, PLS

Cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
Site Map



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www.andersonengineering.com

October 6, 2015

Alan Mauer, Biologist
U.S. Fish & Wildlife Service
Bend Field Office
63095 Deschutes Market Road
Bend, Oregon 97701

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Mr. Mauer;

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

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The Crescent Sanitary District requests your comments regarding any potential impacts for the project.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,

Darryl Anderson, PE, PLS

cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
Site Map



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17681 Hwy. 395, Lakeview, Oregon 97630

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www.andersonengineering.com

October 6, 2015

John Allen, Forest Supervisor
US Forest Service – Deschutes National Forest
63095 Deschutes Market Road
Bend, OR 97701

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Mr. Allen;

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

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As is shown on the map, construction may take place in the Deschutes National Forest. We are seeking information on environmental effects from the project as an input to the Rural Utilities Service's decision-making process. We request your review of this project for potential impacts to officially designated areas within the Deschutes National Forest and any recommendations you may have to mitigate or avoid these effects. We would also appreciate receiving any information regarding additional review requirements that your agency may have.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,


Darryl Anderson, PE, PLS

cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
Site Map



ANDERSON ENGINEERING AND SURVEYING, INC.

PROFESSIONAL ENGINEERS AND LAND SURVEYORS

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October 6, 2015

Holly Shea
Confederated Tribes of Warm Springs
PO Box 460
Warm Springs, OR 97761

Re: Crescent Sanitary District – Proposed Wastewater System Improvements

Dear Ms. Shea;

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

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The Crescent Sanitary District requests the assistance of the Confederated Tribes of Warm Springs in identifying areas of cultural significance that may be affected by the project. Please provide any recommendations you may have to mitigate or avoid any potential impacts.

We would appreciate a response within 30 days. If you need further information or wish to discuss the project, please contact Darryl Anderson at (541) 947-4407.

Sincerely,

Darryl Anderson, PE, PLS

cc: Charles Lawrence, Crescent Sanitary District

Enclosures: Proposed Facility Map
Site Map

From: "Manezes, Susie" <smanezes@blm.gov>
Date: 10/30/2015 7:58 AM (GMT-08:00)
To: Darryl Anderson <darryla@andersonengineering.com>, Jeffrey Kitchens <jhkitch@blm.gov>, Carol Benkosky <cbenkosk@blm.gov>, Michelle McSwain <mmcswain@blm.gov>, Michael Mckey <mmckey@blm.gov>
Subject: RE: Crescent Sanitary District Proposed Wastewater System Improvements

Darryl:

The BLM Prineville District received your letter regarding the proposed wastewater system improvements for the community of Crescent in Klamath County, Oregon on October 13, 2015.

We have reviewed the proposal, as identified on the maps you submitted along with your letter, and we have no concerns regarding this project. The project, as identified on the maps, is on private property and the BLM managed lands are quite a distance from the project.

The project, as proposed, looks like it would be a benefit to the community of Crescent and we hope the project is a success. Thank you for the opportunity to respond.

Regards,

--

Susie Manezes

Assistant Field Manager

Prineville District BLM

541-416-6725

smanezes@blm.gov



United States
Department of
Agriculture

Forest
Service

Deschutes National Forest

63095 Deschutes Market Road
Bend, OR 97701
541-383-5300

File Code: 1340; 7430
Date: October 27, 2015

Darryl Anderson, PE, PLS
Anderson Engineering & Surveying, Inc.
17681 Hwy 395
Lakeview, Oregon 97630

Dear Mr. Anderson:

Thank you for allowing the Deschutes National Forest to provide feedback on the Proposed Wastewater System Improvements in Crescent, Oregon. The Crescent Ranger District has been in communication with the Crescent Sanitary District and Anderson Engineering and Surveying throughout the development of this project. As the project will not occur on Deschutes National Forest Land, we do not have any concerns at this time. Please continue to keep us updated on the status of the improvements.

Sincerely,



JOHN ALLEN
Forest Supervisor



Telephone Response received from Perry Chocktoot – Director of Cultural Heritage – Klamath Tribes

12/9/2015 – 8:40 a.m.

Mr. Chocktoot stated that the Crescent Wastewater Project would be in a culturally significant area. Cultural surveys and monitoring during construction would be required.



Trisha Roninger <trisha.roninger@gmail.com>

Fwd: Crescent Wastewater Project Conference Call (UNCLASSIFIED)

2 messages

Andrea Rabe <andrea@rabeconsulting.com>
To: Trisha Roninger <trish@rabeconsulting.com>

Wed, Dec 9, 2015 at 10:57 AM

----- Forwarded message -----

From: **Ortiz, Omar M NWP** <Omar.M.Ortiz@usace.army.mil>
Date: Wed, Dec 2, 2015 at 11:49 AM
Subject: RE: Crescent Wastewater Project Conference Call (UNCLASSIFIED)
To: Carmen Tague <carment@andersonengineering.com>
Cc: Andrea Rabe <andrea@rabeconsulting.com>

Classification: UNCLASSIFIED
Caveats: NONE

Hi Carmen,

The utility work through wetlands and waterways may be authorized through Nationwide Permit No. 12 (Utility Line Activities).

It may be worth looking into determining whether DSL would require a JPA, because the way it looks, all activities are temporary, so I don't believe the Corps needs a full JPA.

I could provide a copy of a pre-construction notification template if a JPA is not required.

Respectfully,

Omar Ortiz
Project Manager | Eugene Permit Section | Regulatory Branch
U.S. Army Corps of Engineers, Portland District, Eugene Regulatory Field Office
211 E 7th Ave Ste 105
Eugene, OR 97401-2722
Phone: (541) 465-6878 | Blackberry: (541) 600-5665 | Email:
omar.m.ortiz@usace.army.mil

Website: <http://www.nwp.usace.army.mil/Missions/Regulatory.aspx>

-----Original Message-----

From: Carmen Tague [mailto:carment@andersonengineering.com]
Sent: Tuesday, December 01, 2015 9:53 AM
To: 'jylcy104@gmail.com'; 'dolan.cher@yahoo.com'; 'mary.a.baker@oregon.gov';
annette.liebe@oregon.gov; kelly.hill@state.or.us; john.d.pellissier@oregon.gov;
kimberley.young@or.usda.gov; dennis.griffin@oregon.gov; brett.l.hodgson@state.or.us;
corey.heath@state.or.us; kirk.jarvie@state.or.us; Ortiz, Omar M NWP; Jennifer_OReilly@fws.gov; Andrea
Rabe; perry.chocktoot@klamathtribes.com
Subject: [EXTERNAL] Crescent Wastewater Project Conference Call

Good morning,

We have decided not to hold a conference call on the project at this time. Thanks for everyone who responded with their availability. We will be contacting a few people directly and then assessing the responses to decide if we need to schedule a meeting at a later date. I have attached a copy of the draft environmental report if you would like to review the information on the project. Please let me know if you would like additional information or a copy of the engineering report.

Thank you!

Carmen Tague

Anderson Engineering & Surveying, Inc.

PO Box 28, Lakeview, OR 97630

[\(541\) 947-4407](tel:5419474407)

Classification: UNCLASSIFIED

Caveats: NONE

--

Andrea Rabe, PWS
Senior Environmental Consultant
Rabe Consulting
421 Commercial Street
Klamath Falls, Oregon 97601
[541-891-2137](tel:5418912137)

Carmen Tague <carment@andersonengineering.com>

Fri, Dec 11, 2015 at 11:25
AM

To: "Ortiz, Omar M NWP" <Omar.M.Ortiz@usace.army.mil>

Cc: "Trisha Roninger (trish@rabeconsulting.com)" <trish@rabeconsulting.com>, Andrea Rabe <andrea@rabeconsulting.com>, Darryl Anderson <darryla@andersonengineering.com>

Hello Omar -

Thank you for your response to my email. None of the activities proposed in the Crescent Wastewater Project will occur in waterways or wetlands as we have avoided them. I have attached a zoomed in map of the areas where the proposed project is close to the National Wetland Inventory. Collection system pipelines will be installed in existing streets and utility corridor right-of ways within road embankments. These areas are already highly impacted, built up with fill, and are of higher elevation than their

surroundings. The Crescent Cutoff Road crosses the Little Deschutes River via an existing bridge. The collection system pipes will be attached to the bridge, and placed within existing roadway alignments and embankments across the waterway. Therefore, it should not be necessary to obtain a Nationwide Permit. We appreciate your input on this project.

Thank you,

Carmen Tague
Anderson Engineering & Surveying, Inc.
PO Box 28, Lakeview, OR 97630
[\(541\) 947-4407](tel:5419474407)

-----Original Message-----

From: Ortiz, Omar M NWP [mailto:Omar.M.Ortiz@usace.army.mil]
Sent: Wednesday, December 02, 2015 11:49 AM
To: Carmen Tague
Cc: Andrea Rabe
Subject: RE: Crescent Wastewater Project Conference Call (UNCLASSIFIED)

[Quoted text hidden]

 **Detail of NWI.pdf**
1407K



Trisha Roninger <trisha.roninger@gmail.com>

Fwd: FW: Crescent Wastewater Project - Environmental Review

2 messages

Andrea Rabe <andrea@rabeconsulting.com>
To: Trisha Roninger <trish@rabeconsulting.com>

Wed, Dec 9, 2015 at 10:38 AM

----- Forwarded message -----

From: Carmen Tague <carment@andersonengineering.com>
Date: Mon, Dec 7, 2015 at 2:44 PM
Subject: FW: Crescent Wastewater Project - Environmental Review
To: Andrea Rabe <andrea@rabeconsulting.com>*Carmen Tague*

Anderson Engineering & Surveying, Inc.

PO Box 28, Lakeview, OR 97630

(541) 947-4407

From: O'Reilly, Jennifer [mailto:jennifer_oreilly@fws.gov]
Sent: Monday, December 07, 2015 2:18 PM
To: Carmen Tague
Subject: Re: Crescent Wastewater Project - Environmental Review

Hello Carmen-

I quickly reviewed your report and wanted to make you aware that the Critical Habitat designation for Oregon spotted frog (OSF) has not yet been finalized. Therefore your review should state that you do not expect the project to have an effect on "Proposed" critical habitat.

It sounds as though wetlands are adjacent to the area proposed for pond construction and that this area is proposed critical habitat for OSF. I want to make you aware that there can be indirect effects to spotted frogs through pond construction as these areas may attract the species and warm ponds can also attract bull frogs which are predators of OSF. Based on the Figures in the report, it appears that the ponds will be constructed some distance (??) from the wetland areas. However, a pump station will be directly adjacent to the wetlands (distance?). If ponds are located a long enough distance from the proposed critical habitat and wetlands, then there is less of an issue for the pond site to become occupied by OSF. I'd need more detail on the distance of the pond construction area from the proposed critical habitat to make a better

assessment. I suggest you add a couple of sentences to the report for clarification. It may help streamline consultation with the Forest Service when it comes time to pursue a Special Use Permit from the agency to implement this project. You also may want to describe if the pump station will be pulling water from the Little Deschutes (I didn't think that it did). There may be further effects to the species if that were the case.

Overall, the FWS is in support of this project to reduce nitrogen inputs to the surface and groundwater systems.

Let me know if you have any questions.

Thanks,

Jennifer

Jennifer O'Reilly
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Bend Field Office
63095 Deschutes Market Road
Bend, OR 97701
Direct line: [541-312-6426](tel:541-312-6426)
Main line: [541-383-7146](tel:541-383-7146)

><(((*)> ><(((*)> ><(((*)> ><(((*)> ><(((*)>

On Mon, Dec 7, 2015 at 1:43 PM, Carmen Tague <carment@andersonengineering.com> wrote:

Good afternoon,

We are trying to finalize the Environmental Report for the Crescent Wastewater Facility Program and would like to include any comments your agency may have regarding the project. You should have received the draft copy of the environmental report in a previous email. Please let me know if you would like any additional information about the project.

Please send me any comments you would like to have included in the report. I would appreciate a reply even if you have no comments at this time.

If you have any questions please do not hesitate to contact me. Thank you for your time and assistance in completing this review.

Carmen Tague

Anderson Engineering & Surveying, Inc.

PO Box 28, Lakeview, OR 97630

[\(541\) 947-4407](tel:5419474407)

--

Andrea Rabe, PWS
Senior Environmental Consultant
Rabe Consulting
421 Commercial Street
Klamath Falls, Oregon 97601
[541-891-2137](tel:5418912137)

Carmen Tague <carment@andersonengineering.com> Fri, Dec 11, 2015 at 11:27 AM
To: "O'Reilly, Jennifer" <jennifer_oreilly@fws.gov>
Cc: Darryl Anderson <darryla@andersonengineering.com>, "Trisha Roninger (trish@rabeconsulting.com)" <trish@rabeconsulting.com>, Andrea Rabe <andrea@rabeconsulting.com>

Hello Jennifer --

Thank you for your response to my email. It was an oversight that we did not realize that Oregon spotted frog critical habitat was not officially designated yet. Thank you for bringing that to our attention and we will update the report.

For your information, there will be no Section 7 consultation with the Forest Service regarding a special use permit. We have obtained access through private land and no longer need the permit.

However, we would still like to address the concerns you identified in our correspondence. The proposed pond construction will occur 1 mile away from the Little Deschutes River and will be constructed on the east side of Highway 97. It is extremely unlikely that Oregon spotted frogs would occupy the pond in the

future given the distance from the river and that they would have to cross a major highway to get there. As such, the pond will not to be spotted frog habitat in the future.

The proposed pump station adjacent to Oregon spotted frog habitat does not pull water from the river. The pump station is a closed system that pumps sewage collected from residential areas to the treatment facility and will have no impact on frog habitat.

We appreciate FWS support of the project and thank you for your time.

Thanks-

[Quoted text hidden]



Trisha Roninger <trisha.roninger@gmail.com>

FW: Crescent Wastewater Project - Environmental Report Comments

Carmen Tague <carment@andersonengineering.com>

Fri, Dec 18, 2015 at 10:46 AM

To: "Trisha Roninger (trish@rabeconsulting.com)" <trish@rabeconsulting.com>

ODOT Response

Carmen Tague

Anderson Engineering & Surveying, Inc.

PO Box 28, Lakeview, OR 97630

(541) 947-4407

From: HILTON William P * Bill [mailto:William.P.HILTON@odot.state.or.us]
Sent: Friday, December 18, 2015 10:22 AM
To: Carmen Tague
Cc: SCHOLTES James M; CREEDICAN Patrick F
Subject: FW: Crescent Wastewater Project - Environmental Report Comments

After looking at your proposal ODOT would need to meet with you to coordinate the location of the pipeline in the vicinity of US 97. Any crossings of the highway would need to be bored and no pipe parallel to the centerline could be placed under the paved portion of the highway.

Please call me if you have any questions.

Bill Hilton

ODOT District 10 Operations Coordinator

63055 N Hwy 97, Bldg K

Bend, OR 97703

Work: (541)388-6054

Cell: (541)280-7924

From: SCHOLTES James M
Sent: Friday, December 18, 2015 9:55 AM
To: HILTON William P * Bill
Subject: FW: Crescent Wastewater Project - Environmental Report Comments

Please review and comment.

Jim

From: LABHART Jeffrey P
Sent: Tuesday, December 15, 2015 10:22 AM
To: SCHOLTES James M
Subject: FW: Crescent Wastewater Project - Environmental Report Comments

Sorry about that. ...

From: Carmen Tague [<mailto:carment@andersonengineering.com>]
Sent: Monday, December 14, 2015 2:12 PM
To: LABHART Jeffrey P
Subject: Crescent Wastewater Project - Environmental Report Comments

Good afternoon,

The Crescent Sanitary District is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may **assess** the environmental impacts of wastewater system improvements for the community of Crescent in Klamath County, Oregon. The proposed project involves development of a wastewater treatment facility and wastewater collection system for the community of Crescent, with the potential for expansion to include the communities of Gilchrist and West Crescent. The area does not currently have a centralized wastewater collection and treatment system, and businesses and residences use individual septic systems. There is increasing concern over nitrate contamination from the aging septic systems in the area and these concerns have made it extremely difficult for any new development to occur in the area. The wastewater improvements are being proposed to reduce groundwater contamination from the on-site septic systems and allow new business and residential development.

The project will consist of installing collection piping in the Crescent area as well as constructing a treatment facility that will include treatment and storage lagoons and a chlorination facility. Once treated, the water will be used for crop irrigation on two 80-acre areas. The piping will cross Highway 97 to the proposed treatment lagoon site. The draft environmental report is attached for your review.

The Crescent Sanitary District is requesting comments from your agency to incorporate into the environmental report. We would appreciate a response at your earliest convenience, even if you have no comments at this time.

If you need further information or wish to discuss the project, please feel free to contact me.

Thank you!

Carmen Tague

Anderson Engineering & Surveying, Inc.

PO Box 28, Lakeview, OR 97630

[\(541\) 947-4407](tel:5419474407)



Trisha Roninger <trisha.roninger@gmail.com>

Crescent Environmental - Response from ODFW

3 messages

Carmen Tague <carment@andersonengineering.com> Fri, Dec 11, 2015 at 4:27 PM
To: "Trisha Roninger (trish@rabeconsulting.com)" <trish@rabeconsulting.com>, Andrea Rabe <andrea@rabeconsulting.com>
Cc: Darryl Anderson <darryla@andersonengineering.com>

I received a telephone call from Bob Hooton at Oregon Fish and Wildlife. He said his staff looked at the Crescent draft documents and they usually make their comments during the permit review process for land use permitting through Klamath County (if the project applied for conditional use, etc.) He did give me a few general comments. He said there could possibly be loss of big game summer range and loss of public access to state forestry land. Irrigated crop areas could be an attraction for big game that is not usually attracted to the area. They would possibly suggest mitigation measures be considered for those concerns.

Carmen Tague

Anderson Engineering & Surveying, Inc.

PO Box 28, Lakeview, OR 97630

(541) 947-4407

Trisha Roninger <trish@rabeconsulting.com> Mon, Dec 14, 2015 at 8:55 AM
To: Carmen Tague <carment@andersonengineering.com>
Cc: "Trisha Roninger (trish@rabeconsulting.com)" <trish@rabeconsulting.com>, Andrea Rabe <andrea@rabeconsulting.com>, Darryl Anderson <darryla@andersonengineering.com>

Hi Carmen -

The draft report I sent last Friday does not include this comment. Is the irrigation area planned to be fenced (therefore, taking care of the wildlife attraction issue)? Will public access really be limited? It seems to me that access through the parcels would still be maintained and the facility area would be restricted. Is this a correct assumption?

-Trisha

[Quoted text hidden]

--

Trisha Roninger
Senior Environmental Consultant
Rabe Consulting
421 Commercial Street
Klamath Falls, Oregon 97601
541-880-8602

Darryl Anderson <darryla@andersonengineering.com>

Mon, Dec 14, 2015 at 10:02 AM

To: Trisha Roninger <trish@rabeconsulting.com>, Carmen Tague <carment@andersonengineering.com>
Cc: Andrea Rabe <andrea@rabeconsulting.com>

Trish

The irrigation area and Lagoon areas are fenced. The Irrigation areas have Signs “reclaimed Water do not Drink” And do not have public access

Darryl Anderson PE PLS

Anderson Engineering and Surveying Inc.

541-947-4407 Of.

541-219-0378 cell

From: trisha.roninger@gmail.com [mailto:trisha.roninger@gmail.com] **On Behalf Of** Trisha Roninger
Sent: Monday, December 14, 2015 8:55 AM
To: Carmen Tague
Cc: Trisha Roninger (trish@rabeconsulting.com); Andrea Rabe; Darryl Anderson
Subject: Re: Crescent Environmental - Response from ODFW

[Quoted text hidden]



Trisha Roninger <trisha.roninger@gmail.com>

Off-site Determination

MCALLISTER Lynne <lynne.mcallister@state.or.us>

Fri, Dec 18, 2015 at 9:31 AM

To: Andrea Rabe <andrea@rabeconsulting.com>, Trisha Roninger <trish@rabeconsulting.com>

Andrea and Trisha,

We provide off-site determinations for individual tax lots as a free service to individual landowners who are intending projects on their lands. We offer this service to the public (i.e. property owners and buyers) to give them a heads up about wetlands or other water features on their property that may be regulated by the state and what that means. This services does not extend to large developments, municipal projects, multi-lot projects, etc.

The option for large municipal projects such as the one you submitted is to conduct an assessment within the purposed areas of impact. If you require DSL concurrence with your wetlands/waters findings, you can submit a wetland determination or a wetland delineation report for the Department's review. Both types of reports require the same state requirements, process and fees.

If you have further questions, please feel free to call or email me.

Thank you.

Lynne

Lynne McAllister

Jurisdiction Coordinator

Oregon Department of State Lands

Aquatic Resource Management Program

775 summer St. NE, Suite 100

Salem, OR 97301

503-986-5300; 503-508-2126

From: andrearabe74@gmail.com [mailto:andrearabe74@gmail.com] **On Behalf Of** Andrea Rabe

Sent: Thursday, December 17, 2015 1:08 PM



Trisha Roninger <trisha.roninger@gmail.com>

Off-site Determination

Andrea Rabe <andrea@rabeconsulting.com>

Thu, Dec 17, 2015 at 1:08 PM

To: Trisha Roninger <trish@rabeconsulting.com>, MCALLISTER Lynne <lynne.mcallister@state.or.us>

Lynne-

Please see attached off-site wetland determination. If you could please review it or pass it to another planner to review, and provide a determination that would be appreciated.

Thanks,
Andrea

--

Andrea Rabe, PWS
Senior Environmental Consultant
Rabe Consulting
421 Commercial Street
Klamath Falls, Oregon 97601
[541-891-2137](tel:541-891-2137)



Crescent offsite request.pdf

9936K

**Wetland Determination Request
Wetlands Program**
Oregon Department of State Lands
775 Summer Street, NE, Suite 100, Salem, OR 97301-1279

BATCH
WD#: _____

The Department of State Lands (DSL) conducts *offsite* wetland determinations upon request. There is no fee for this service. An offsite determination consists of reviewing wetlands and soils maps, aerial photos and other information to determine if wetlands or other regulated water bodies (such as creeks) are present, likely to be present, or unlikely to be present. Only an *onsite* check can verify whether or not there are regulated wetlands on a site. As time allows, DSL staff may be able to conduct a site visit to verify an offsite determination. Please allow 2-3 weeks for an initial response.

If wetlands are present or likely to be present on a parcel or near a project area, a wetland delineation by a qualified wetland consultant may be needed. Wetland delineation reports and the required fee should then be submitted to DSL for review and agency approval.

Please provide the following information:

1. Vicinity map (like a city map) with the precise parcel location indicated.
2. Large scale map (1" = 100' if possible) of the parcel showing existing buildings, property boundaries, any creeks and other features. An annotated tax assessor's map is fine, and a hand-drawn map is acceptable.
3. City, County, and site address. Please fill in below.
City Crescent (or nearest town if outside City limits)
County Klamath
Site address Highway 97 and Crescent Cutoff Road (or nearest cross streets if no address)
4. Township, Range, Section, Quarter/Quarter Section and Tax Lot number(s) (Tax Map number is equivalent). Please fill in below.
Township 24 & 25S Range 8 & 9E Section attached QQ _____ Tax Lot (s) attached

Property owner Legal representative Other (specify): CONSULTANT

Name: ANDREA RABE

Firm: RABE CONSULTING

Mailing Address: 421 COMMERCIAL ST, KLAMATH FALLS, OR 97601

Phone: 541-891-2137 Fax: _____ E-Mail andrea@rabeconsulting.com

I either own or have legal authority to allow access to the property for which this request is made. My signature below authorizes DSL staff to conduct a wetland determination and to access the property to confirm the wetland determination, as needed. (DSL will phone prior to conducting a site visit.)

Signature:  Date: 12/16/15

Print Name: ANDREA CONSULTANT

Attachment for Crescent Sanitary District DSL form

T24S 8E – SECTIONS 36 (southeast quarter entire; SE ¼ NE ¼) & 25 (north half of SE ¼, and NE ¼ SW ¼)

T24S 9E – SECTIONS 19 (NE and SE quarters), 30 (throughout), 31 (NW ¼ NW ¼)

T25S 9E – SECTION 6 (north half of section)

Taxlots

Tax lots are depicted by red lines on the plate maps.

The proposed project is located within road right-of-ways except for the following taxlots:

R-23409-01900-00104-000 (Plate 1)

R-2408-036DD-01900-000 (Plate 30)

R-2409-030CD-02700-000 AND R-2409-030CC-01500 (Plate 41)

R-2509-00000-00200-000(Plates 34, 35, 36, 38) ODF Parcel






Project Description

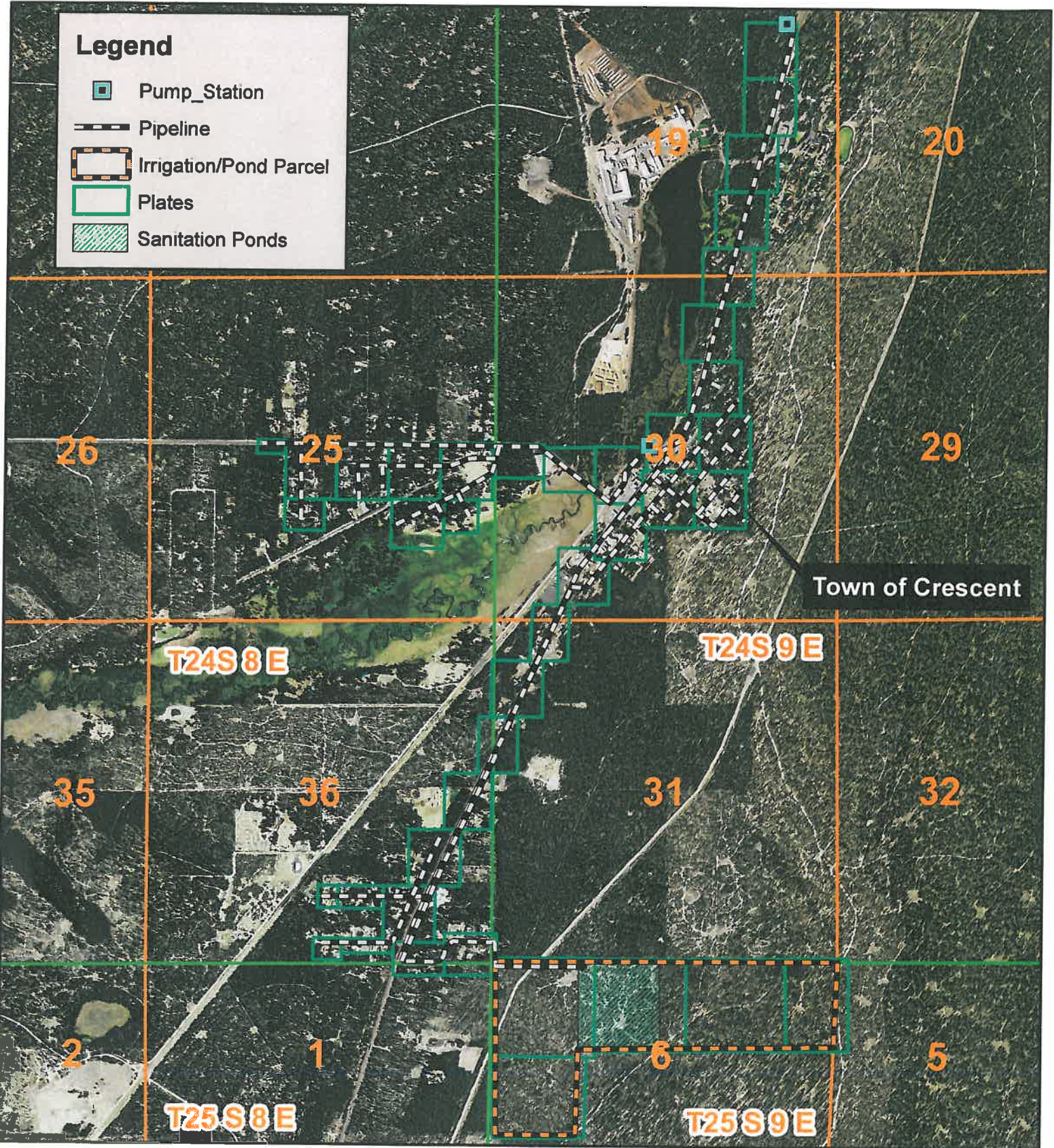
The proposed project involves development of a wastewater treatment facility and wastewater collection system for the communities of Crescent, Gilchrist and West Crescent, Oregon, in Klamath County. The proposed treatment facility includes facultative lagoons, storage pond, chlorination facility, and land application of the reclaimed water. There will be no discharge. The collection system is comprised of 8" minimum sewer main line and 4" lateral lines connecting to homes and businesses located within the rights of way of the streets and existing roadways. These lines collect and combine the sewer to one location where it can be pumped from a pump stations in Gilchrist and Crescent to the treatment facility.

Collection system pipelines will be installed in existing streets and utility corridor right-of ways within road embankments. These areas are already highly impacted, built up with fill, and are of higher elevation than their surroundings. The Crescent Cutoff Road crosses the Little Deschutes River via an existing bridge. The collection system pipes will be attached to the bridge, and placed within existing roadway alignments and embankments crossing the waterway.

All wetlands identified on the National Wetland Inventory map are avoided. A cursory look on site on October 22, 2015 by Andréa Rabe showed no wetlands within the footprint of the proposed project.

Legend

-  Pump_Station
-  Pipeline
-  Irrigation/Pond Parcel
-  Plates
-  Sanitation Ponds



Crescent Sanitary District Wastewater System Improvements

Aerial with Plates Entire Project

Map Created By: Ruth Olsen
Map Created On: December 14, 2015






Rabe Consulting

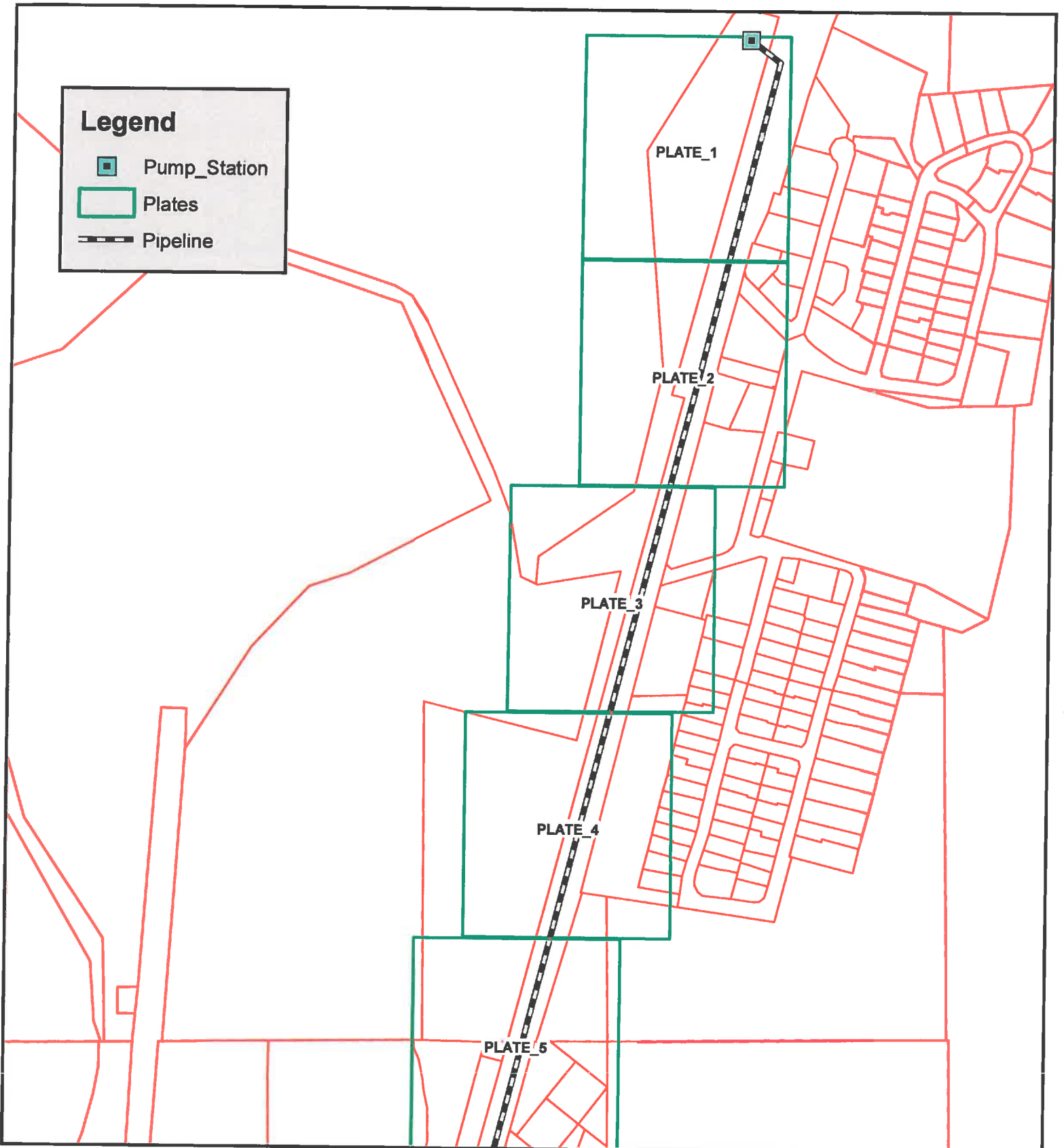


0 700 1,400 2,800
Feet

Data Source: National
Agriculture Imagery
Program (NAIP). Flown
in Summer 2014.
Reproduced by Rabe
Consulting for the
purpose of this document.

Legend

-  Pump_Station
-  Plates
-  Pipeline



Crescent Sanitary District **Wastewater System Improvements**

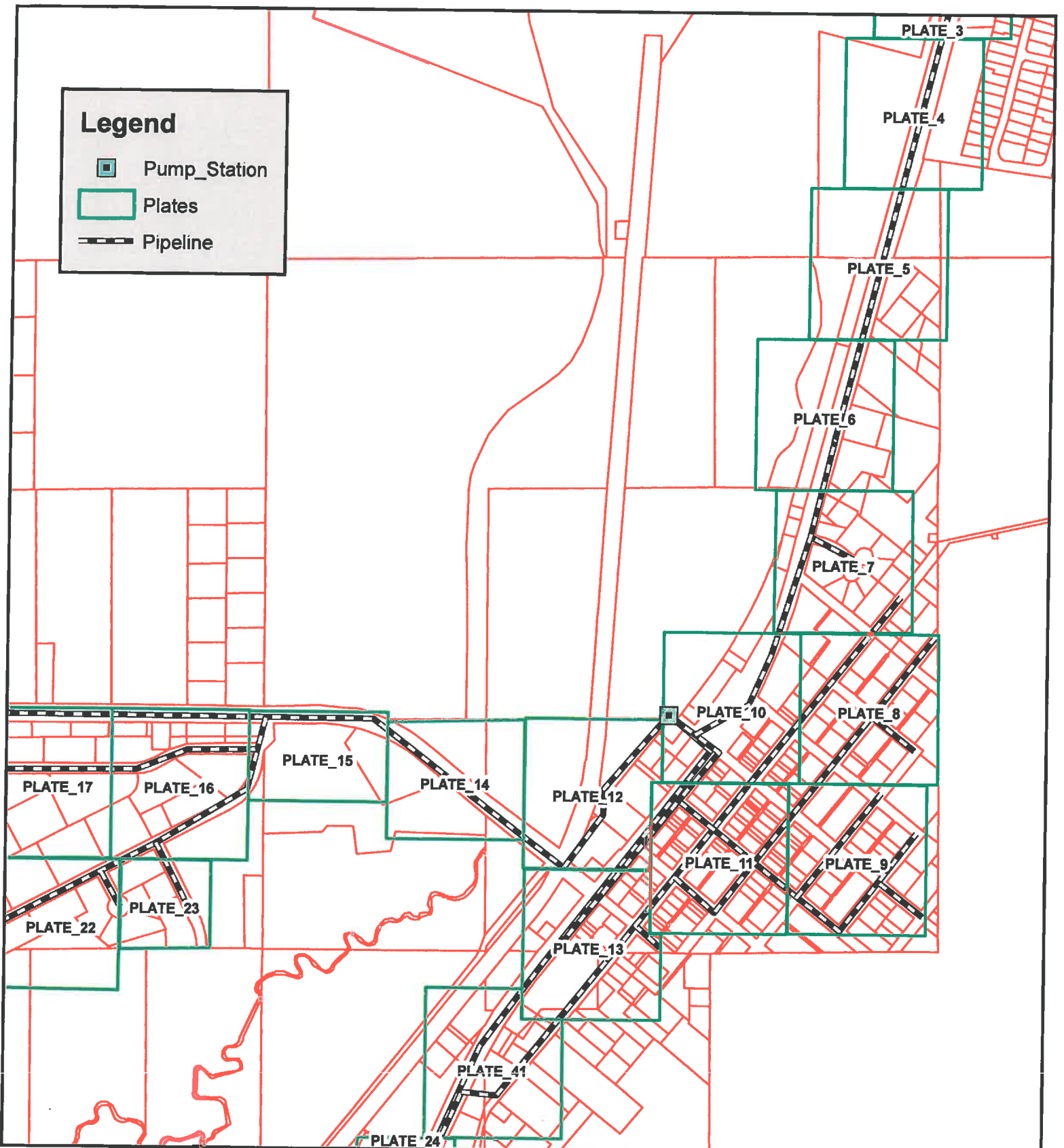
Plate Map 1 to 5 **Pump Station North**

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



0 190 380 760
Feet

Data Source: National
Agriculture Imagery
Program (NAIP). Flown
in Summer 2014.
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**Crescent Sanitary District
Wastewater System Improvements**




**Plate Map 4 to 17, 22, 23, 41
Pump Station and Cutoff Road**

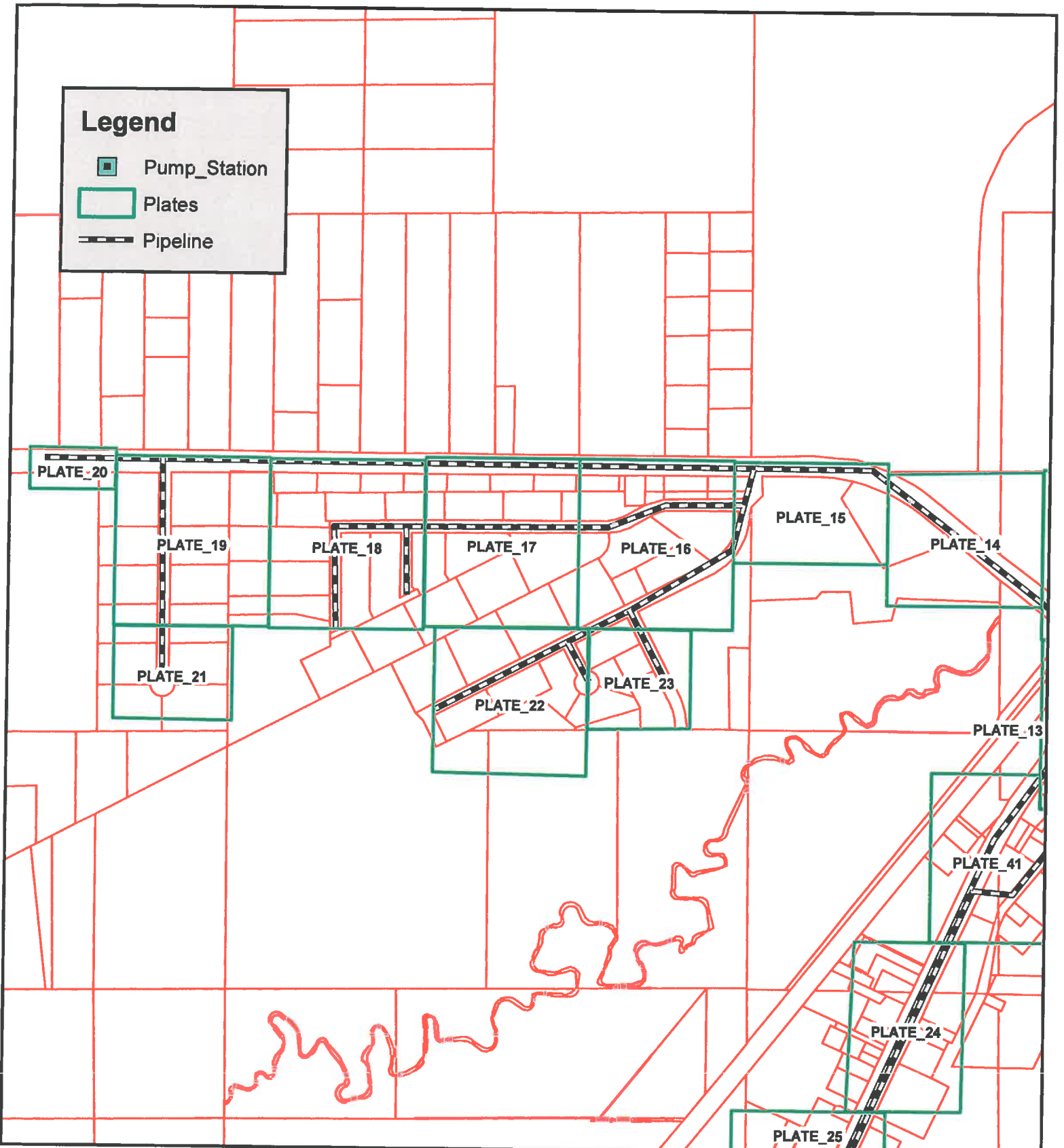
Map Created By: Ruth Olsen
Map Created On: December 14, 2015



Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2014. Reproduced by Rabe Consulting for the purpose of this document.

Legend

-  Pump_Station
-  Plates
-  Pipeline



Crescent Sanitary District Wastewater System Improvements

Plate Map 14 to 23 Crescent Cutoff Road

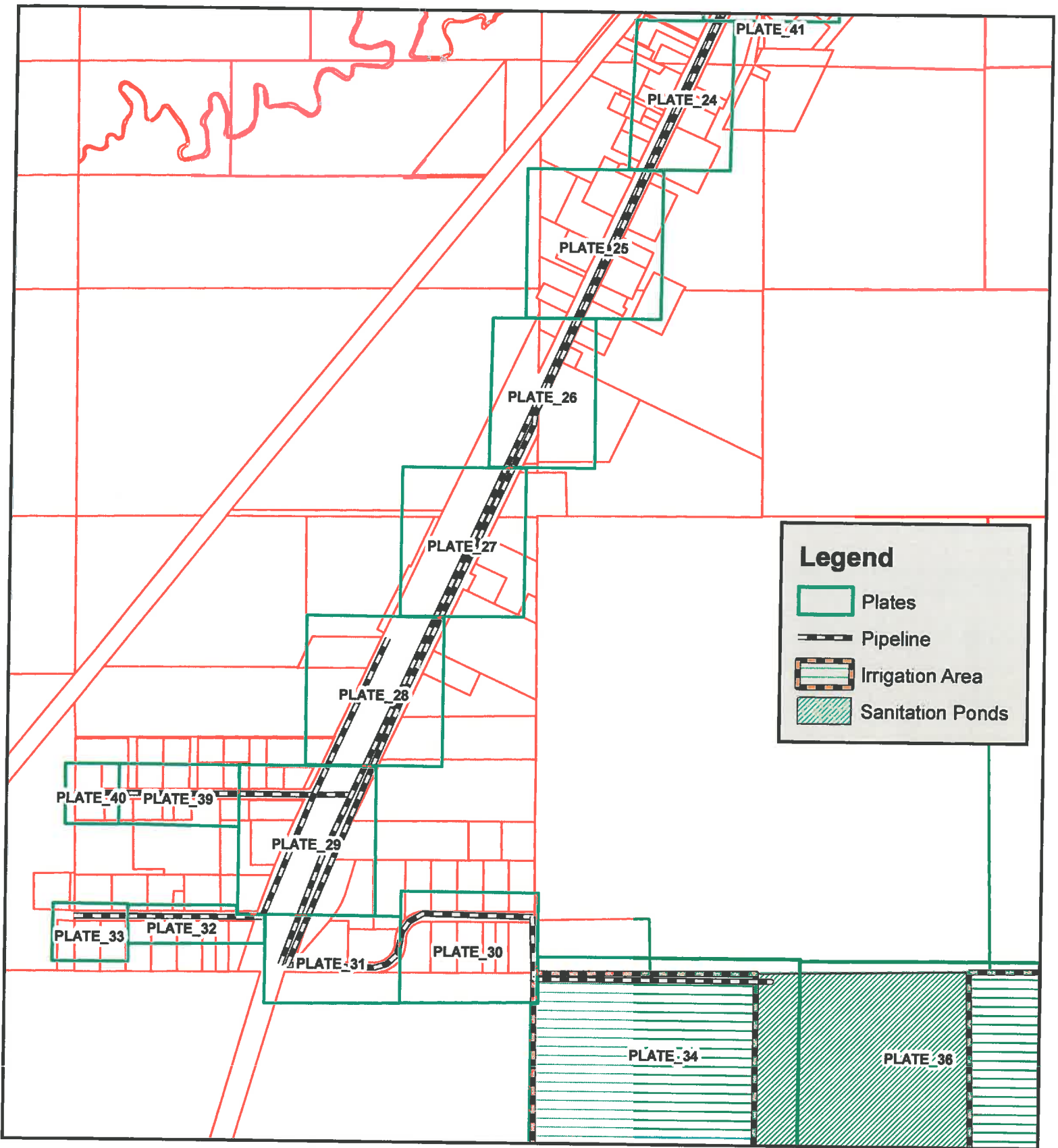
Map Created By: Ruth Olsen
Map Created On: December 14, 2015



Rabe Consulting



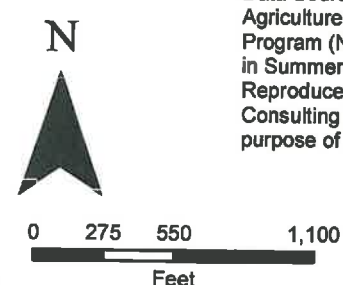
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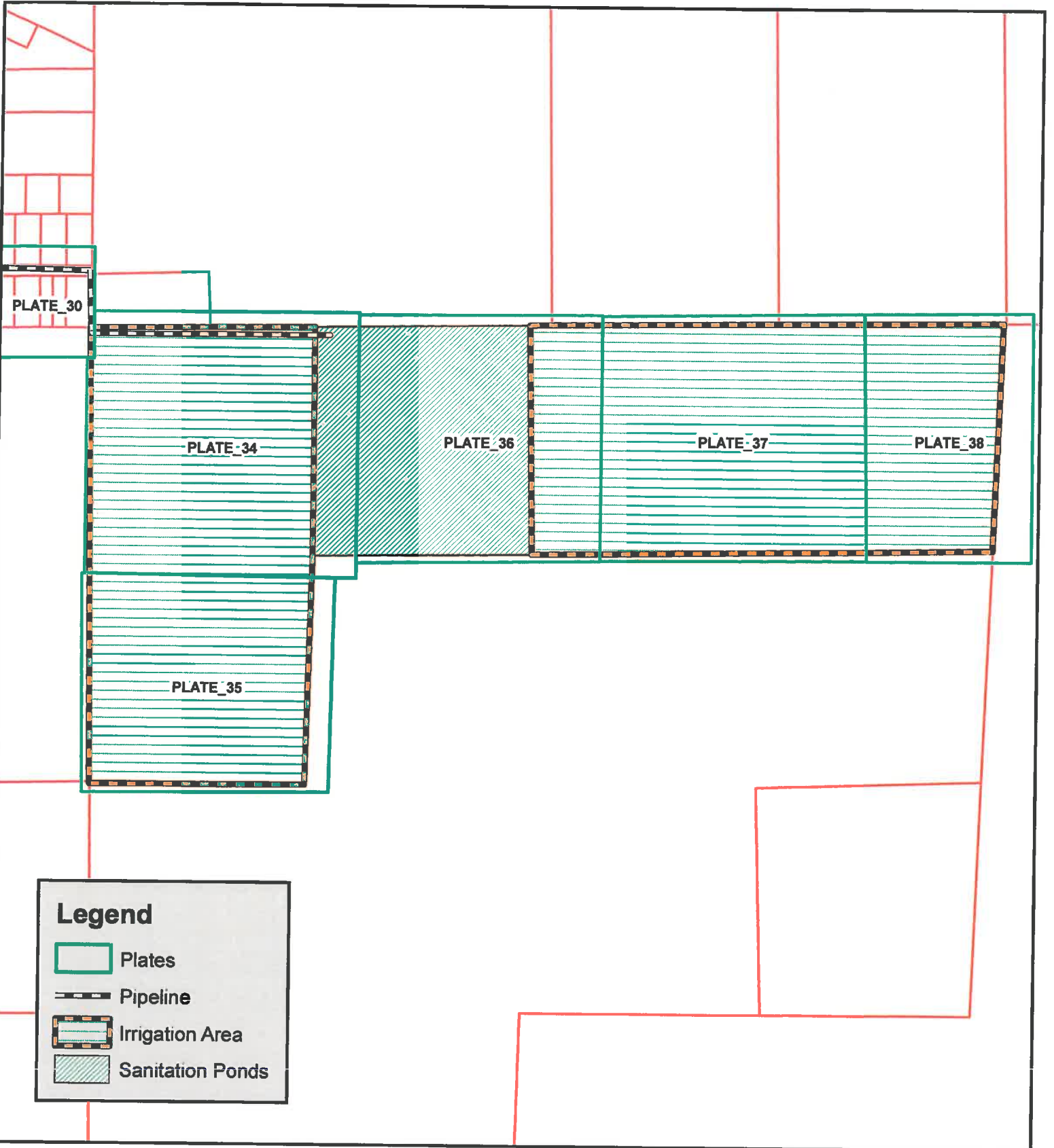
**Crescent Sanitary District
Wastewater System Improvements**

**Plate Map 24 to 40
Southern Alignment and Residential**





Map Created By: Ruth Olsen
Map Created On: December 14, 2015



Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2014. Reproduced by Rabe Consulting for the purpose of this document.

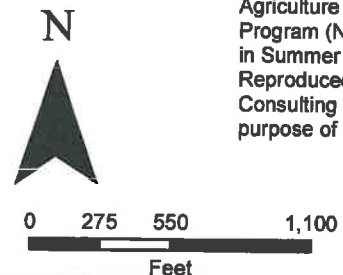


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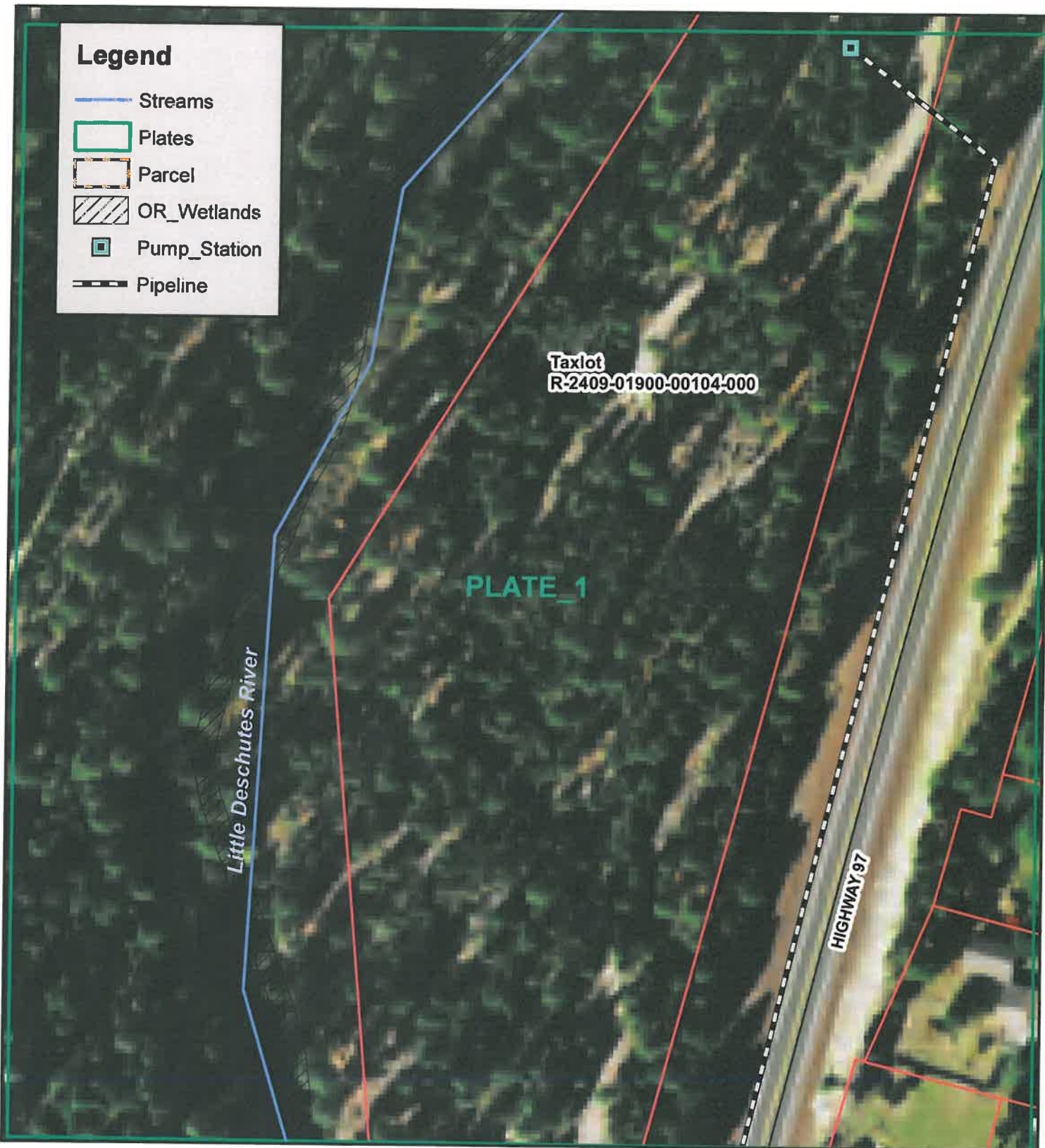
-  Plates
-  Pipeline
-  Irrigation Area
-  Sanitation Ponds

Crescent Sanitary District
Wastewater System Improvements
Plate Map 34 to 38
Southeast Pond & Irrigation Parcel

Map Created By: Ruth Olsen
 Map Created On: December 14, 2015



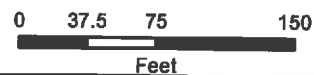
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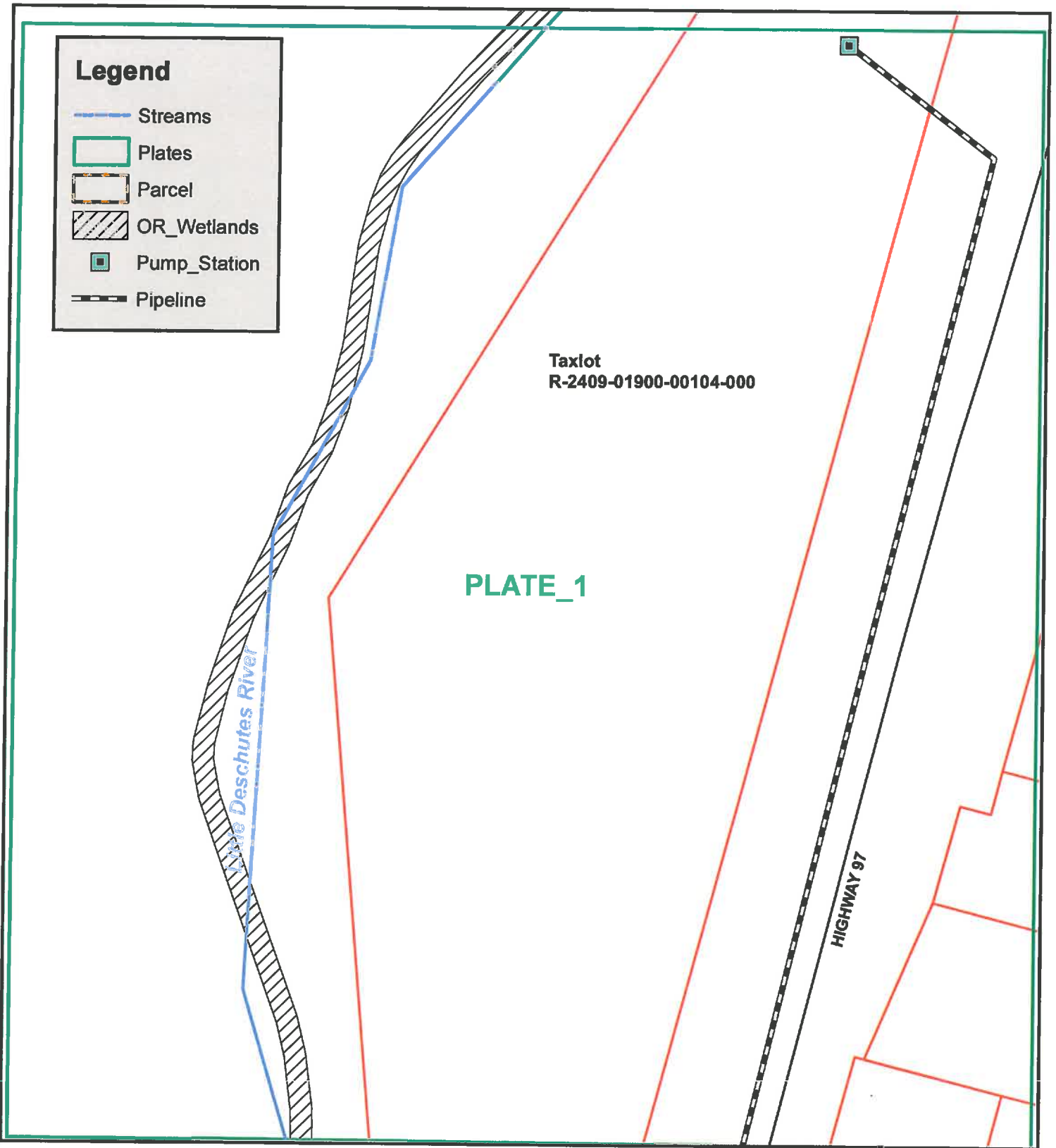
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2014. Reproduced by Rabe Consulting for the purpose of this document.



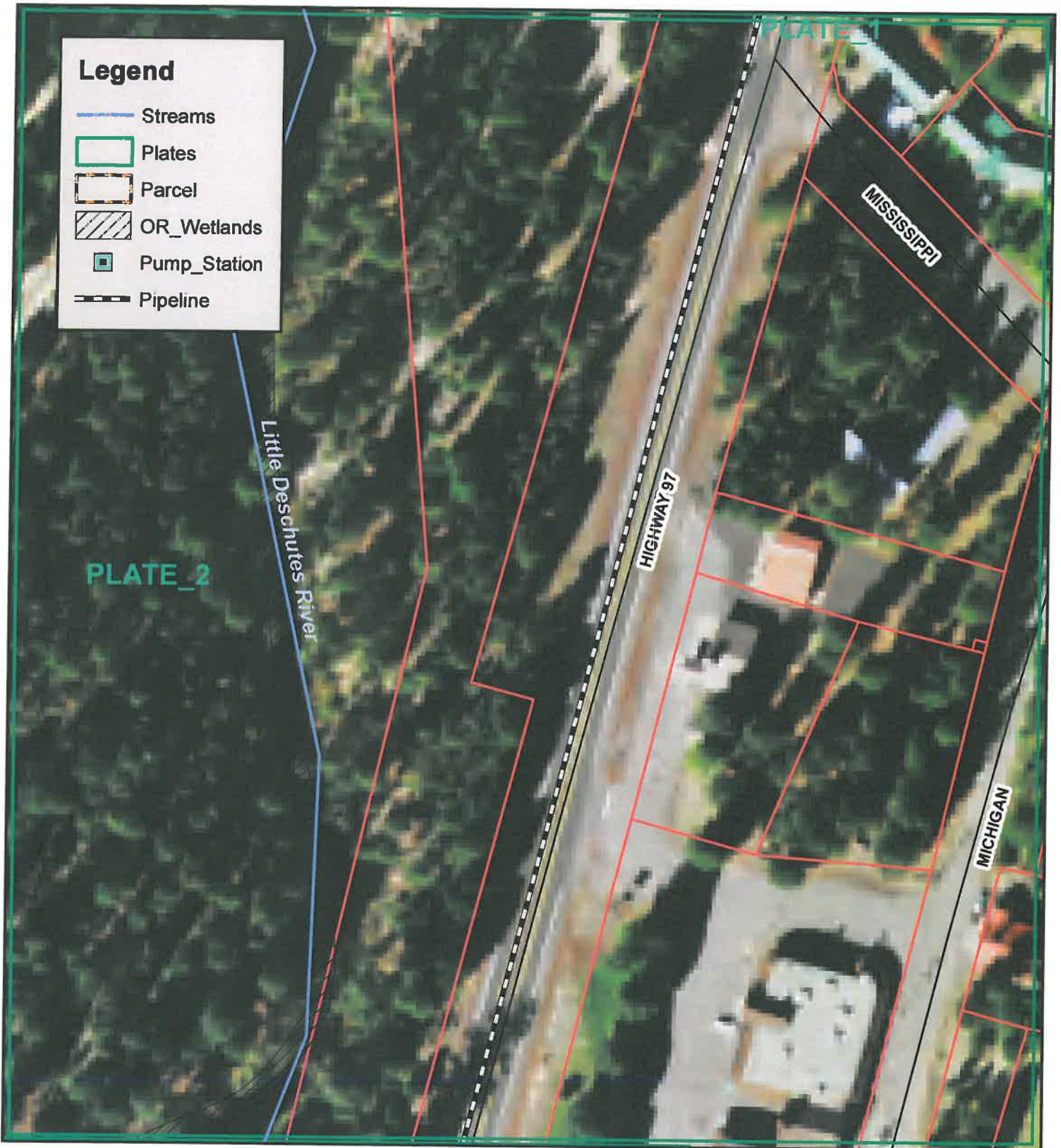
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



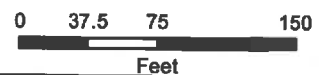
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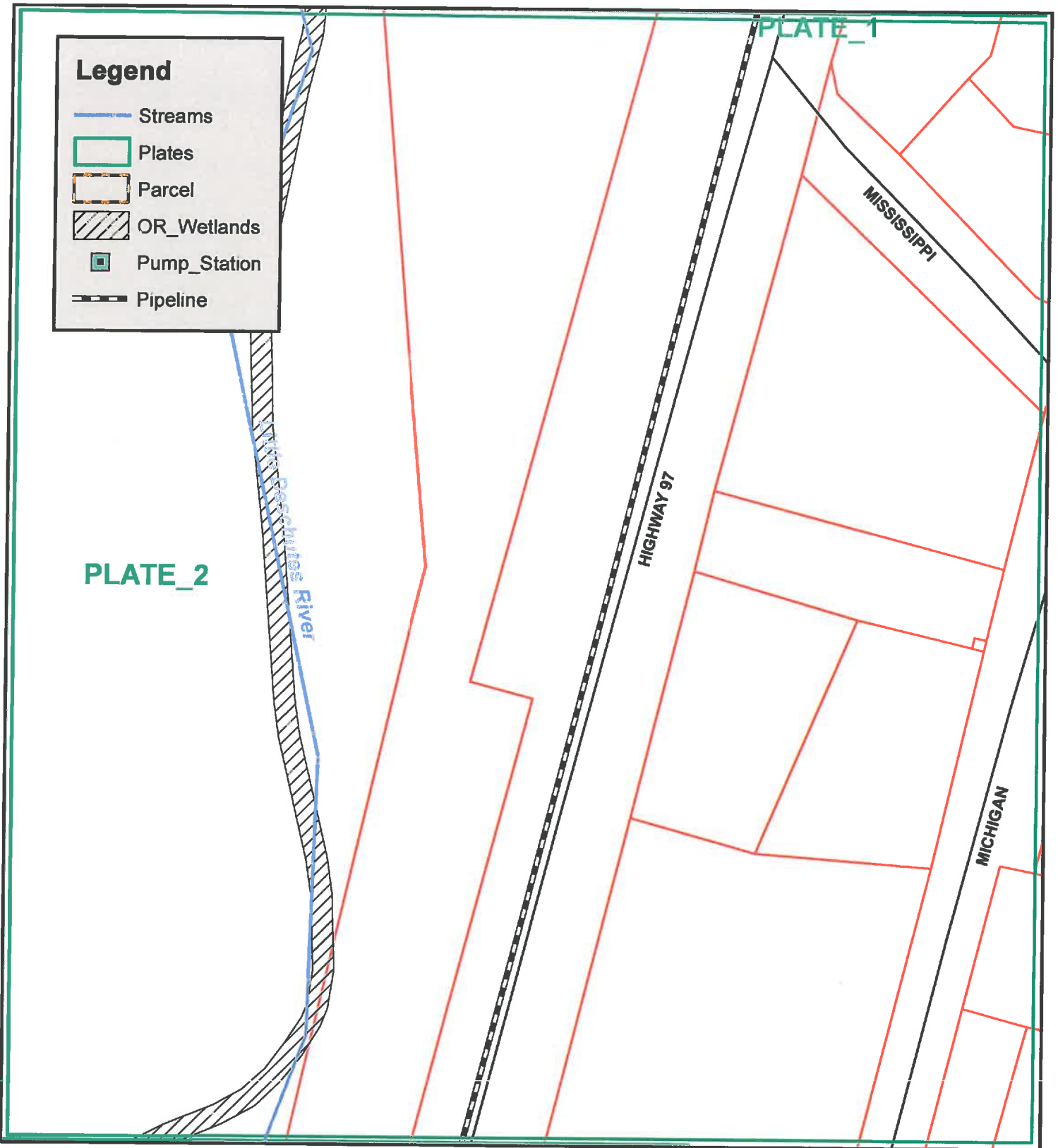
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



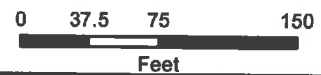
Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2014. Reproduced by Rabe Consulting for the purpose of this document.



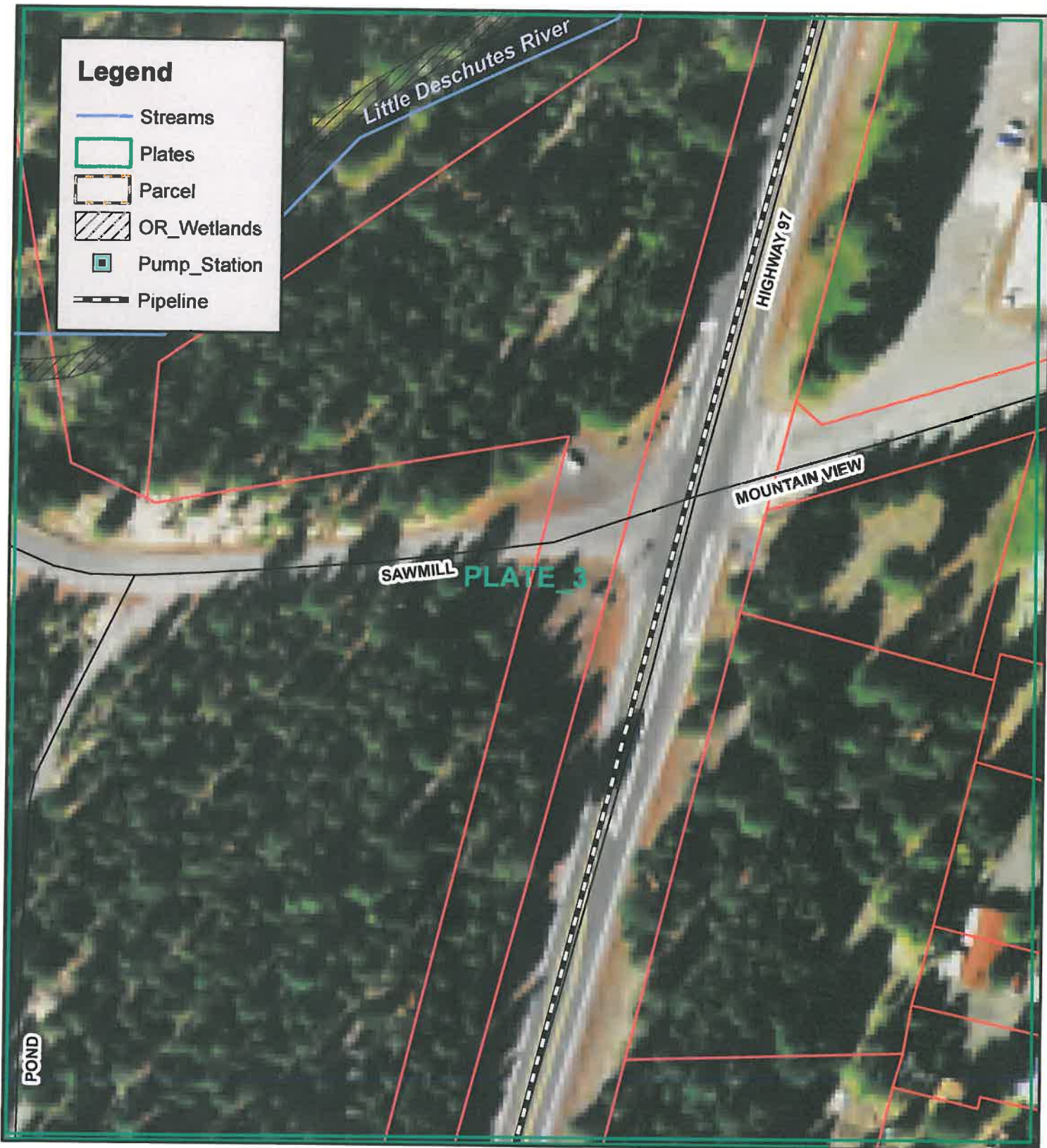
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



Data Source: National
Agriculture Imagery
Program (NAIP). Flown
in Summer 2014.
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purpose of this document.



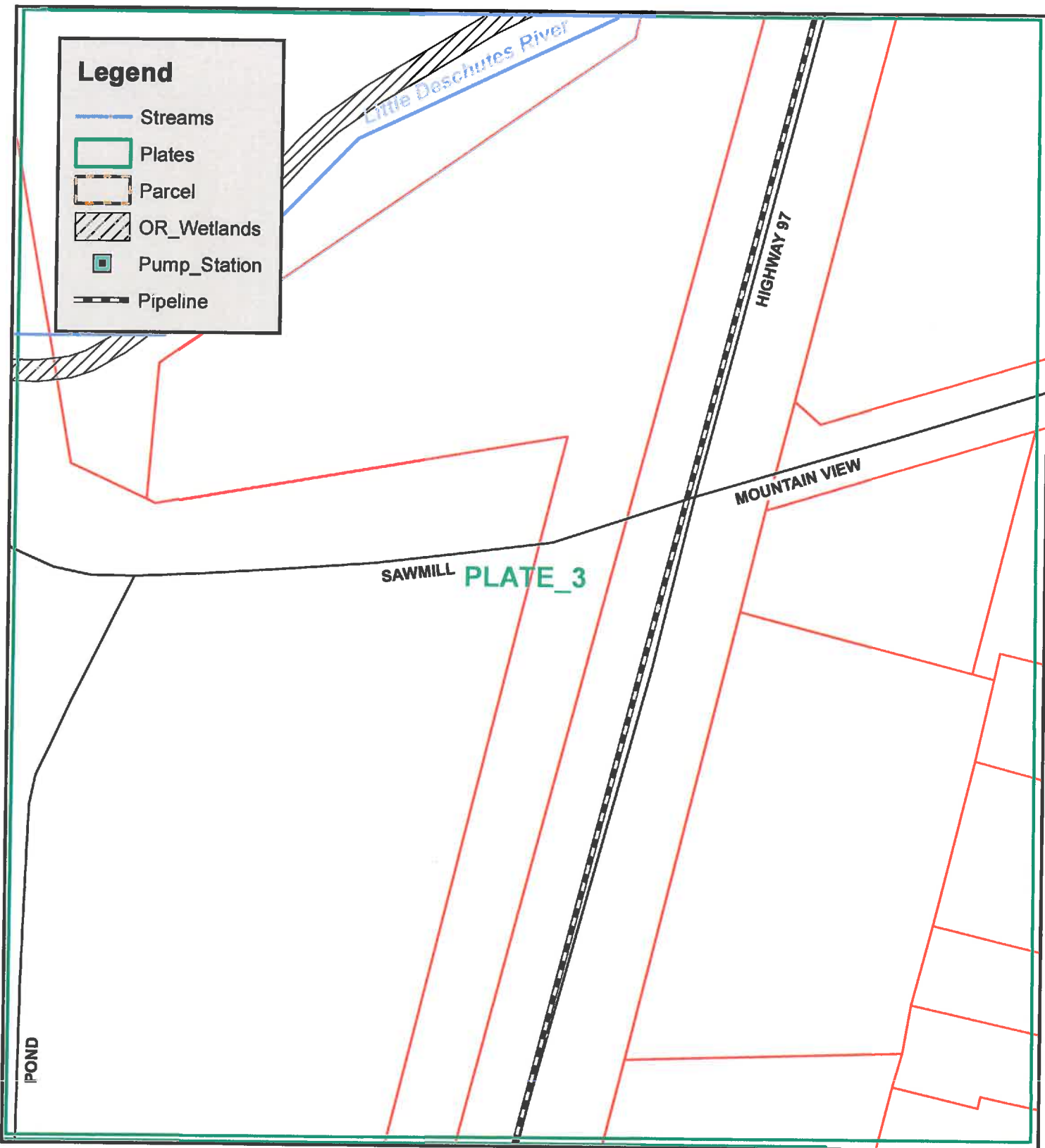
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2014. Reproduced by Rabe Consulting for the purpose of this document.



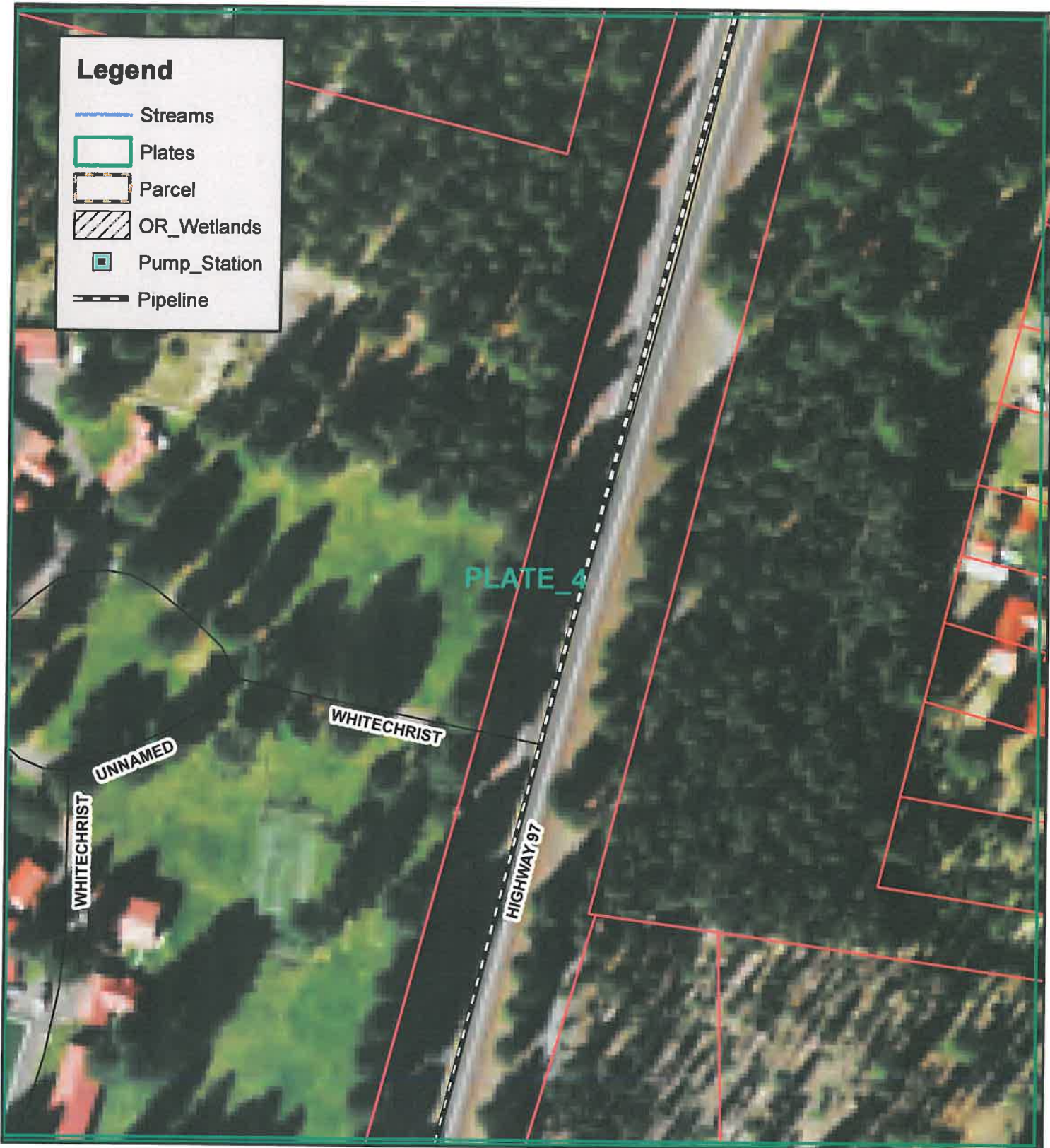
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



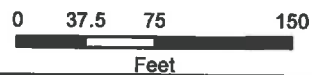
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Agriculture Imagery
Program (NAIP). Flown
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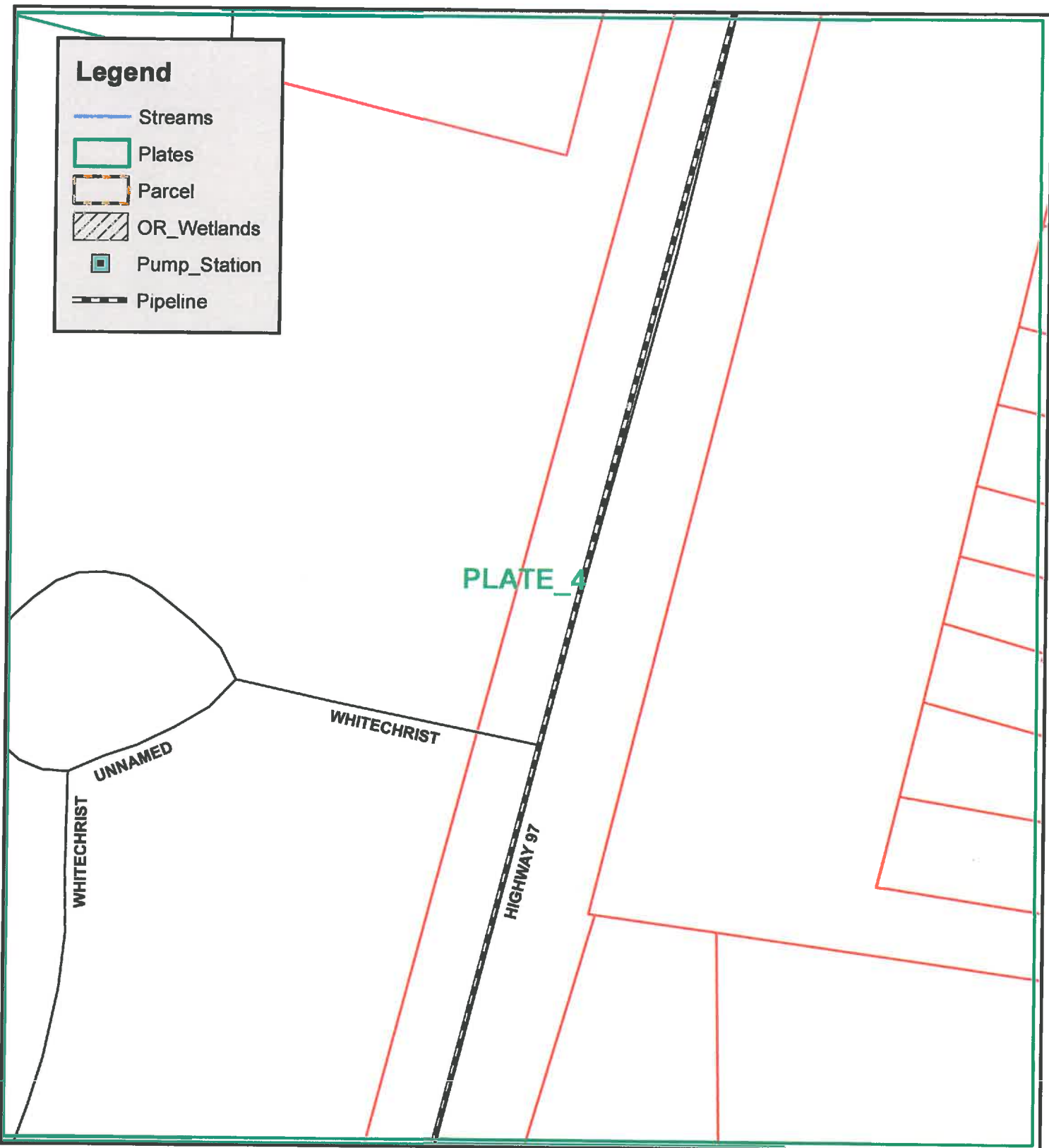
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



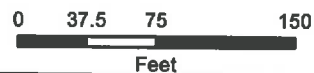
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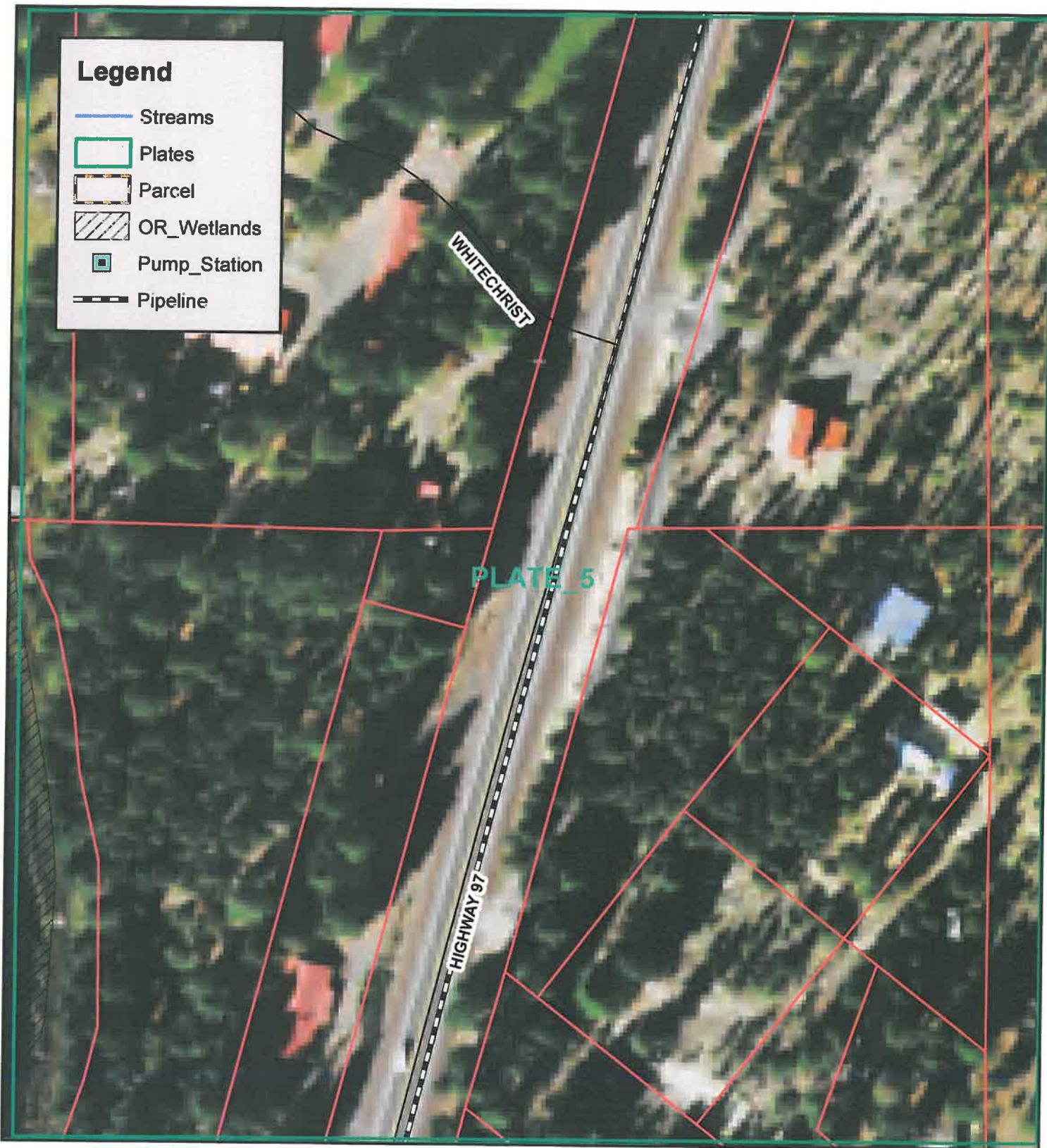
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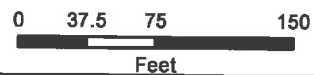
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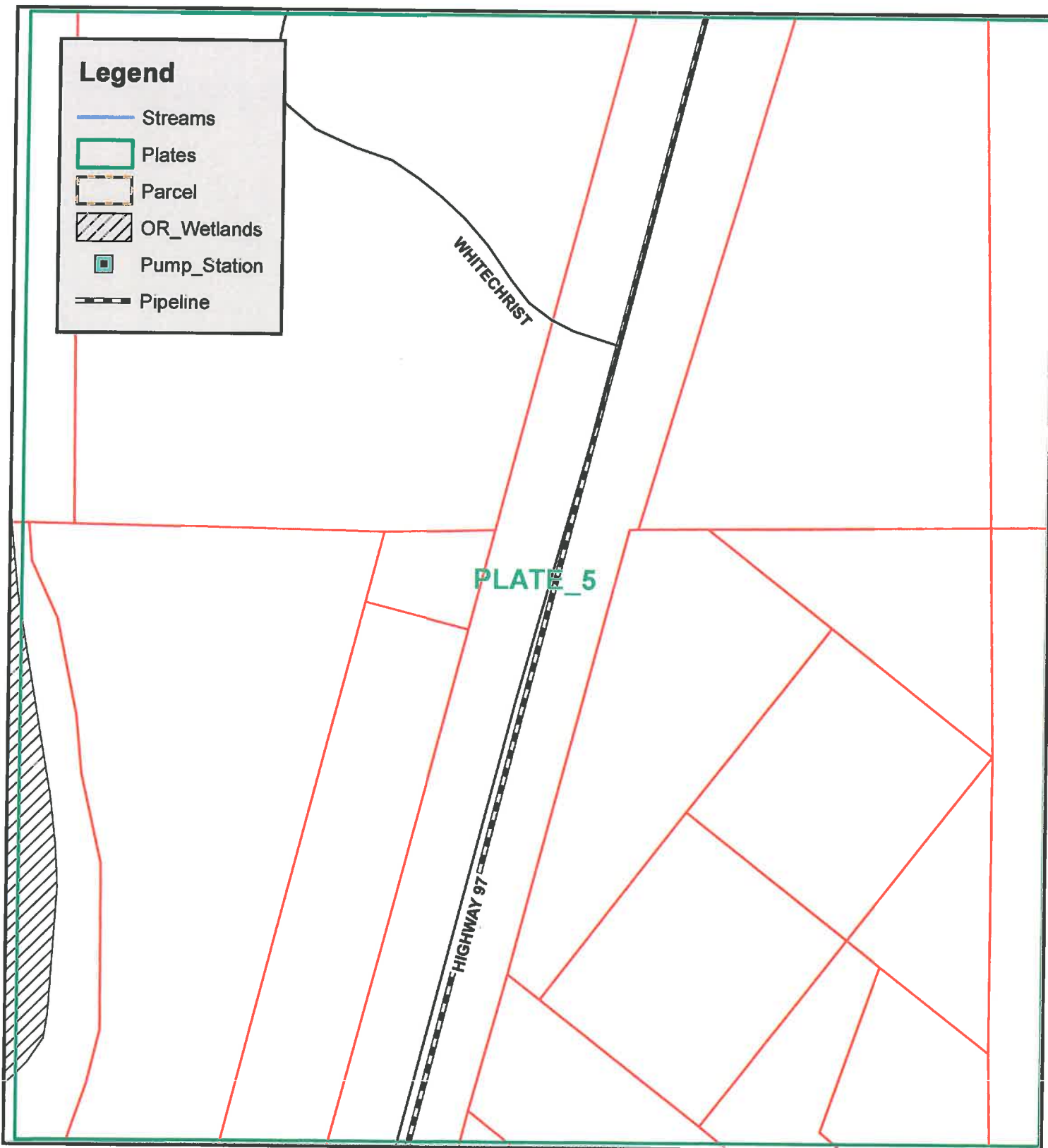
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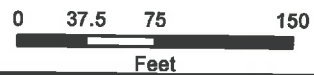
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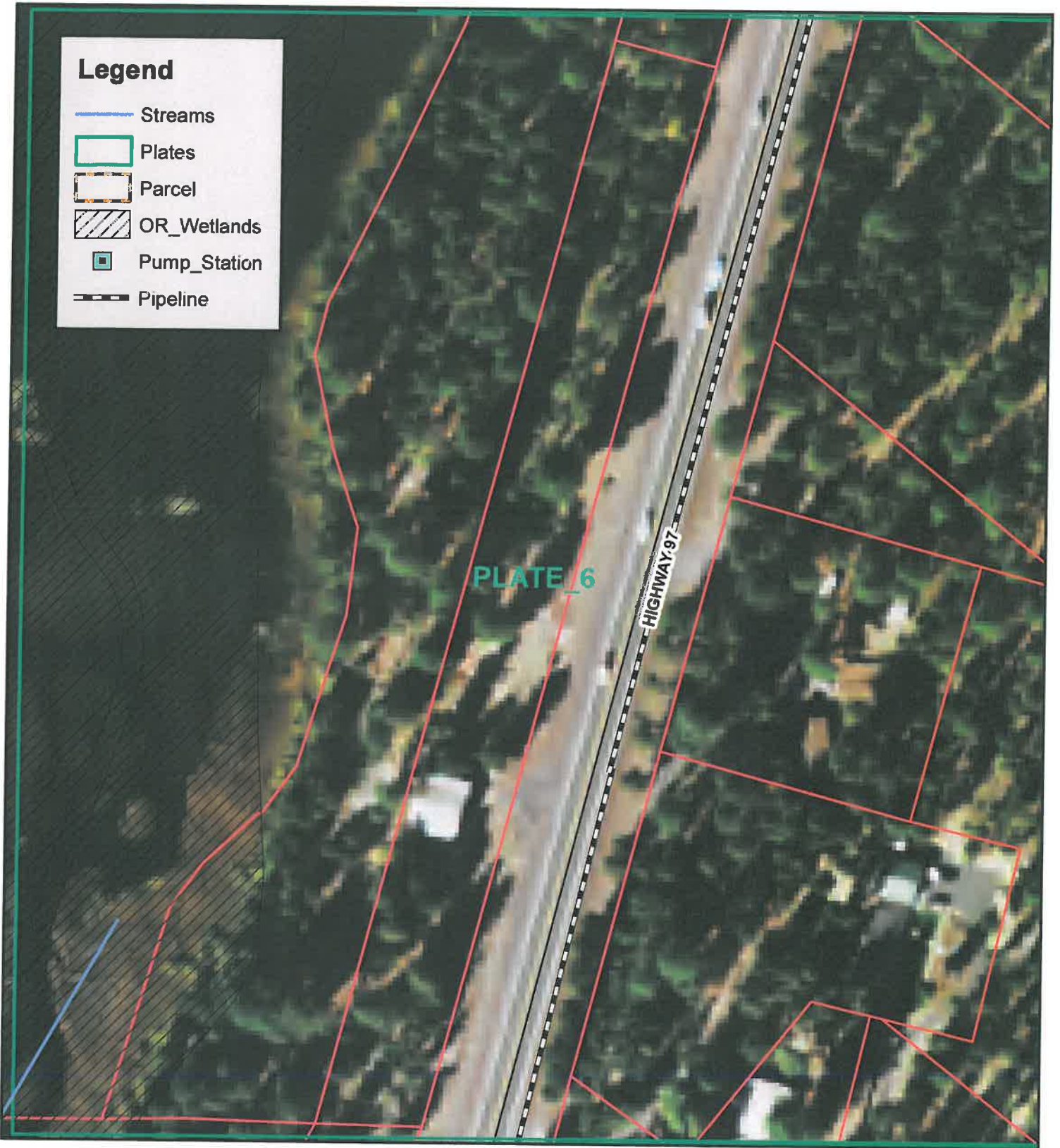
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Legend

-  Streams
-  Plates
-  Parcel
-  OR_Wetlands
-  Pump_Station
-  Pipeline

PLATE_6

HIGHWAY 97

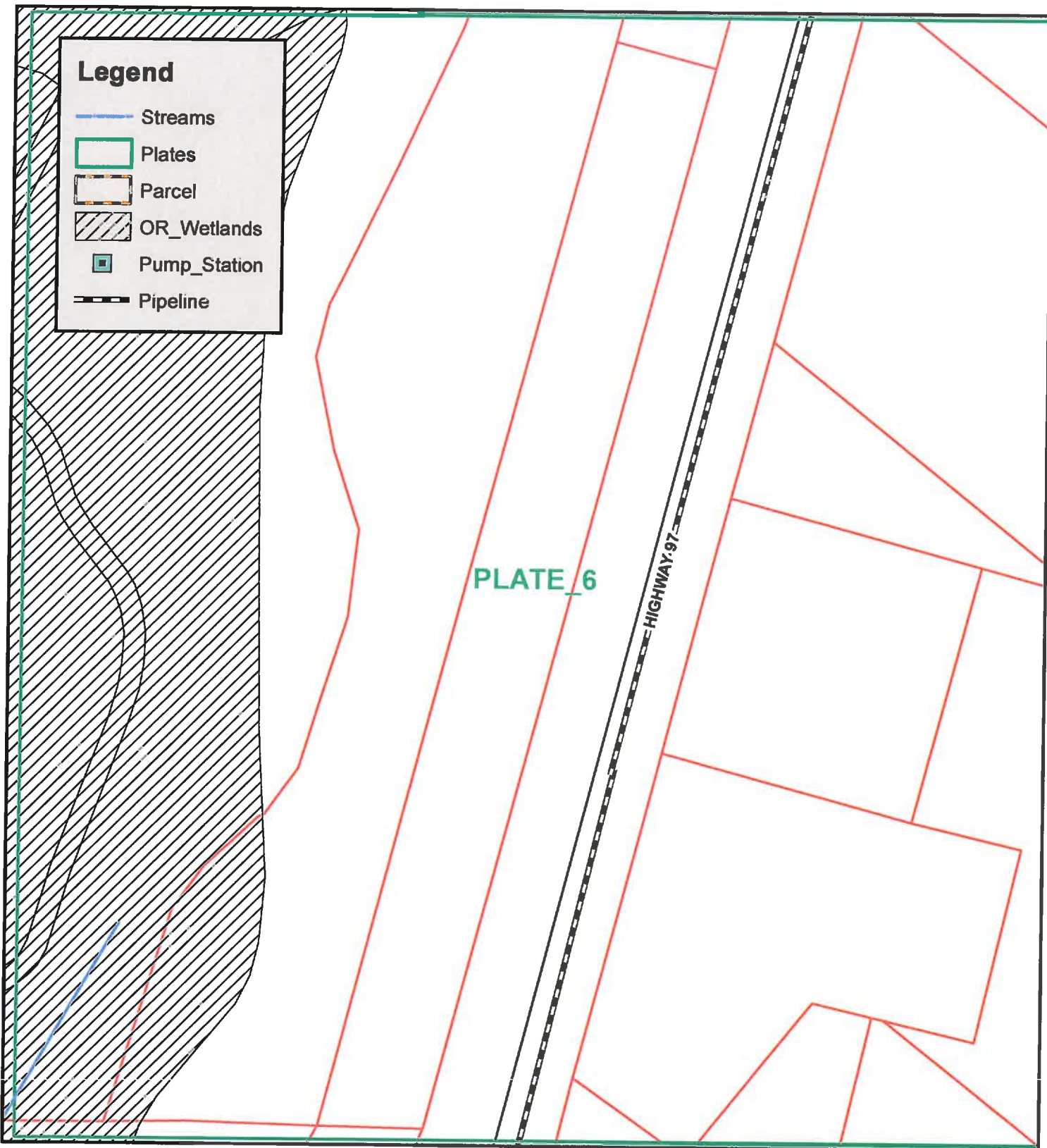
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**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

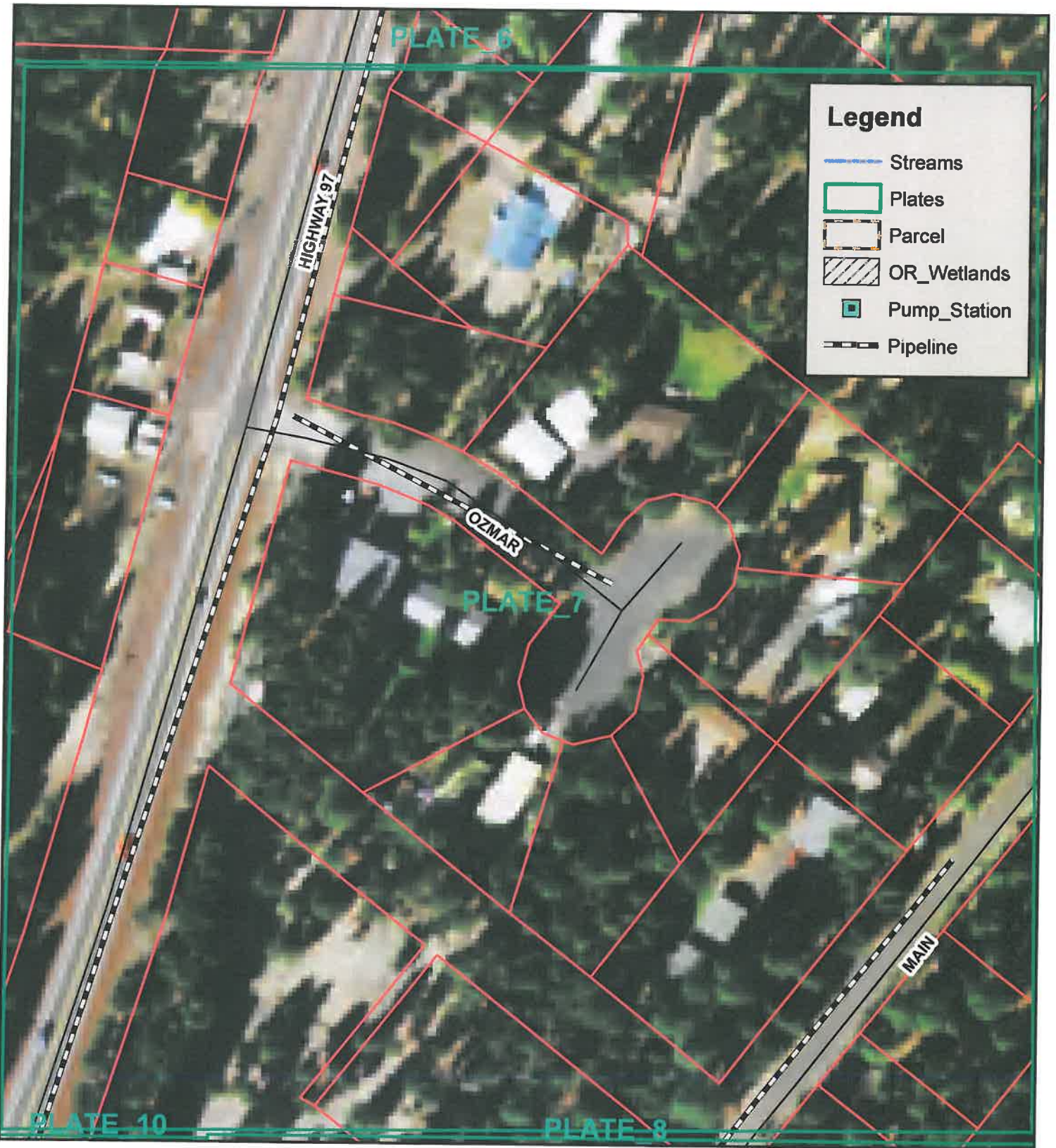
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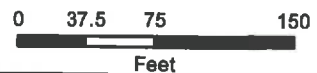
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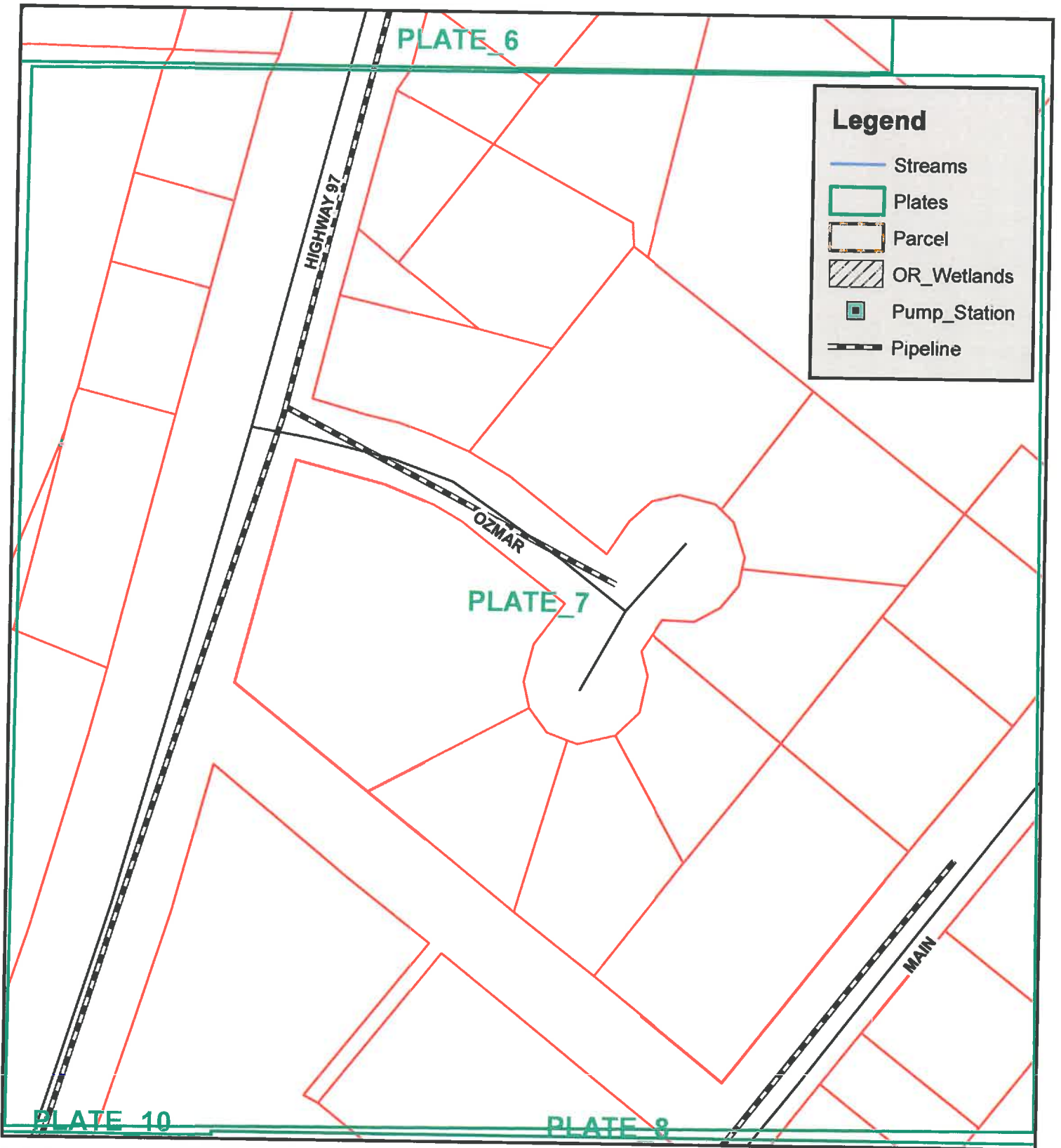
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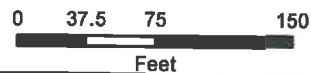
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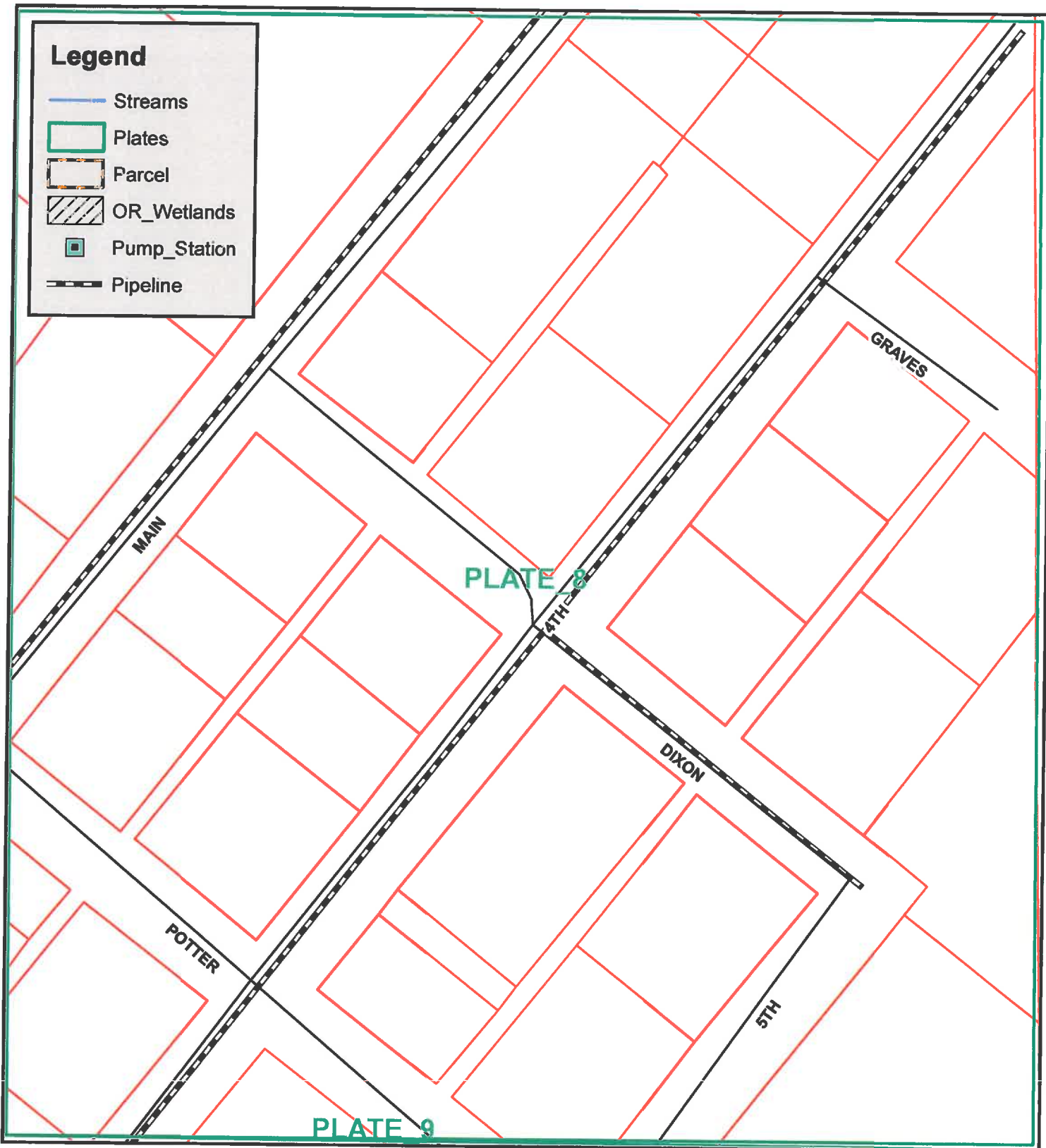
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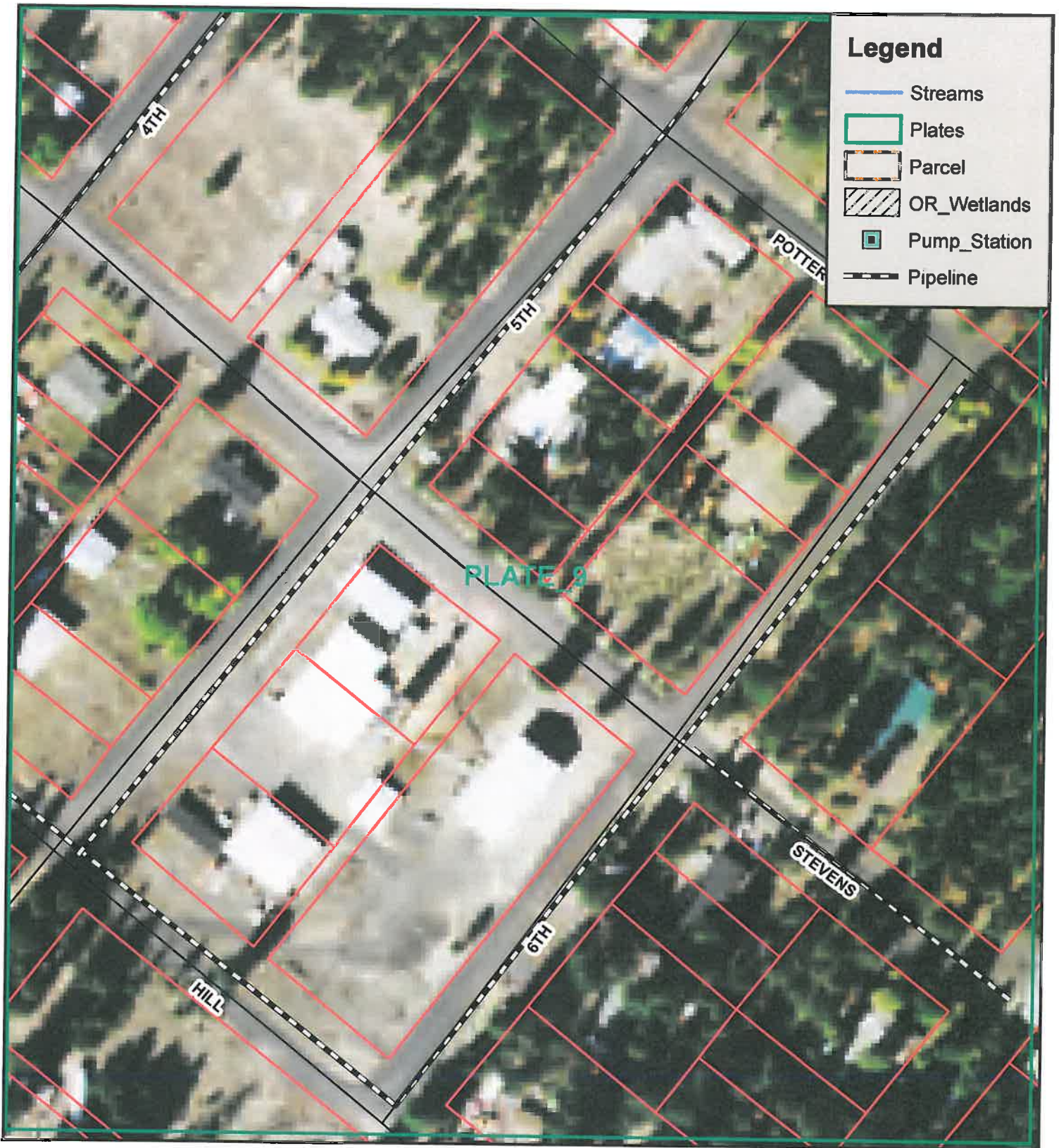
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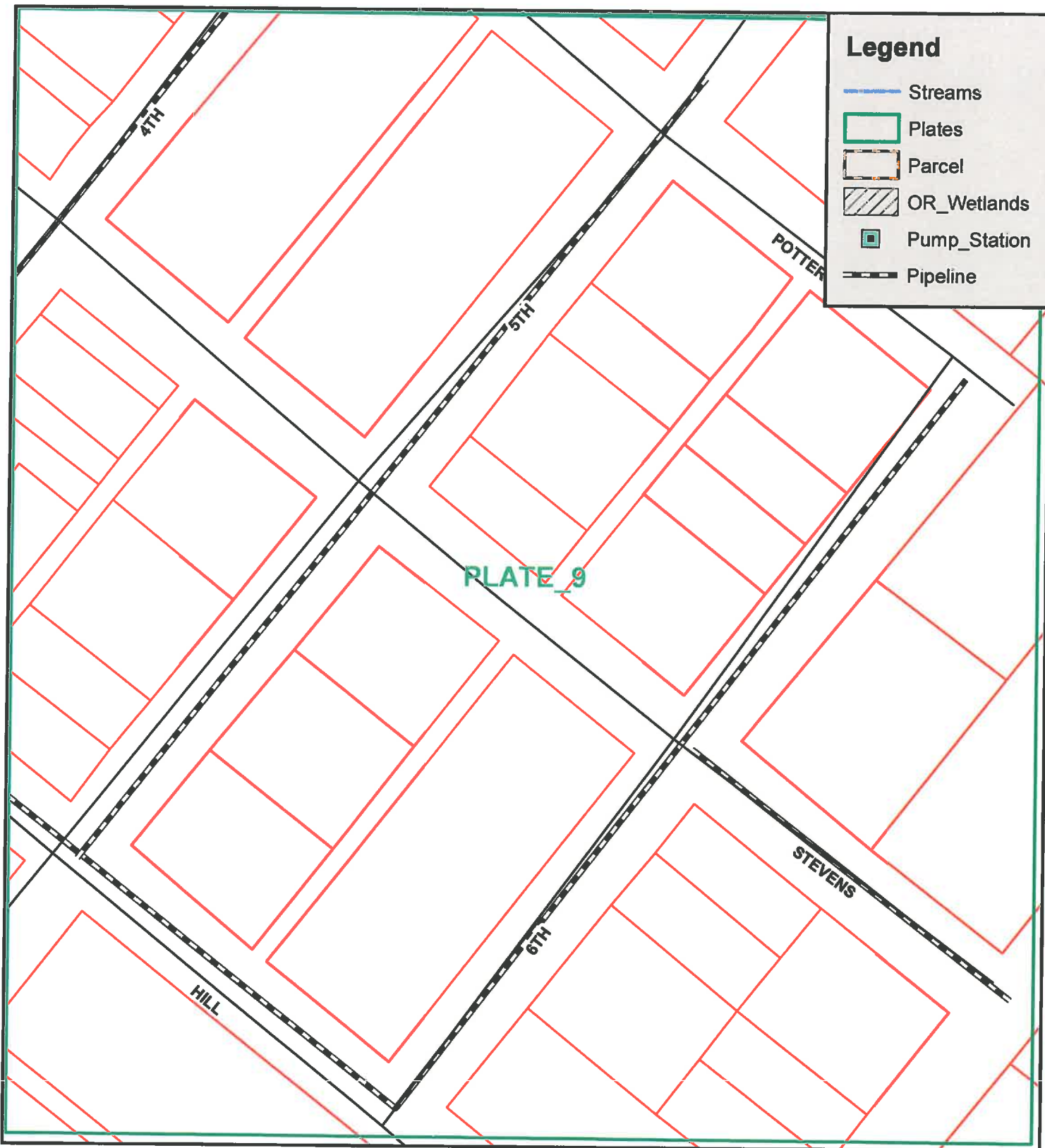
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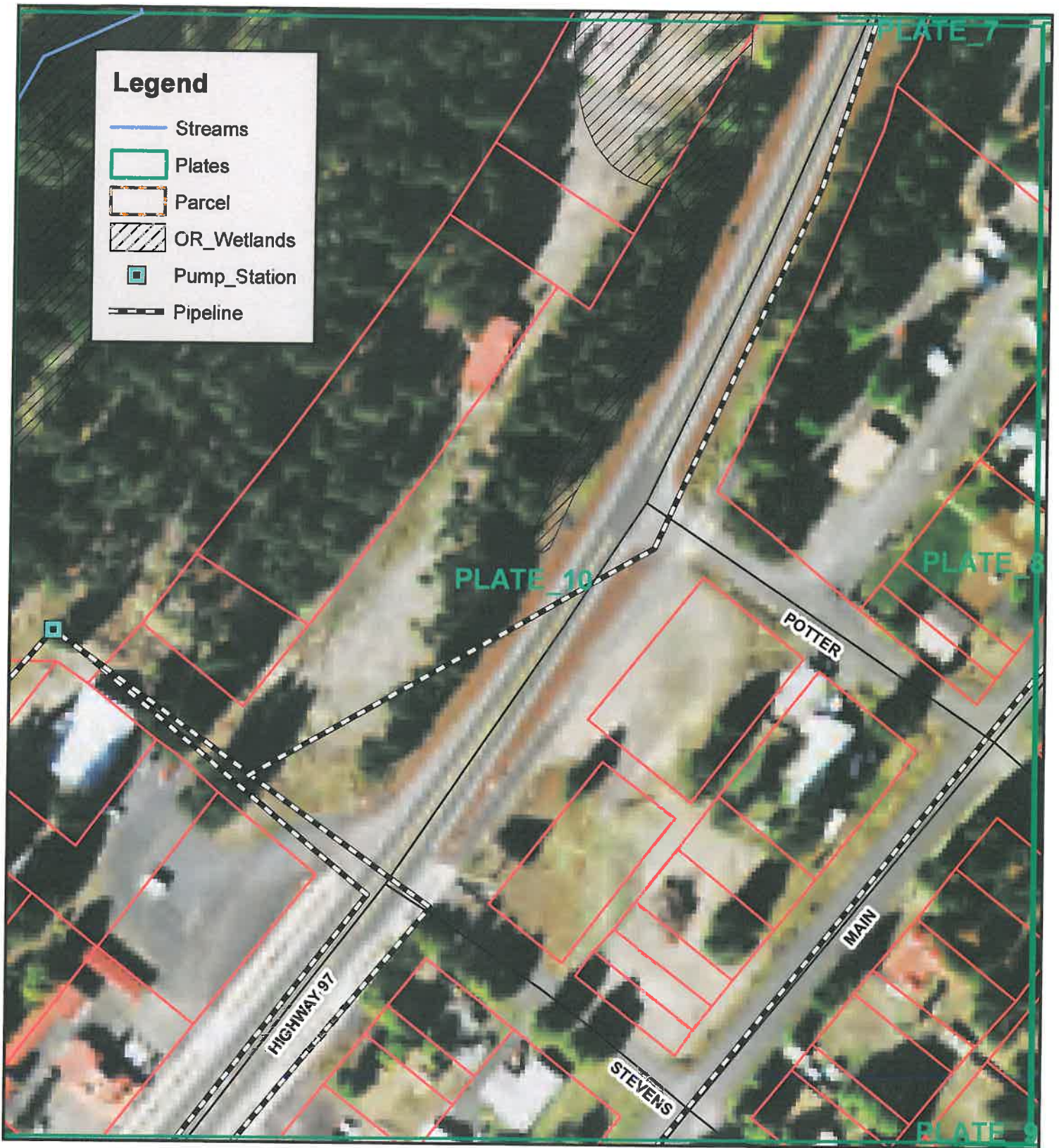
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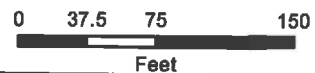
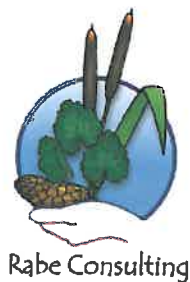
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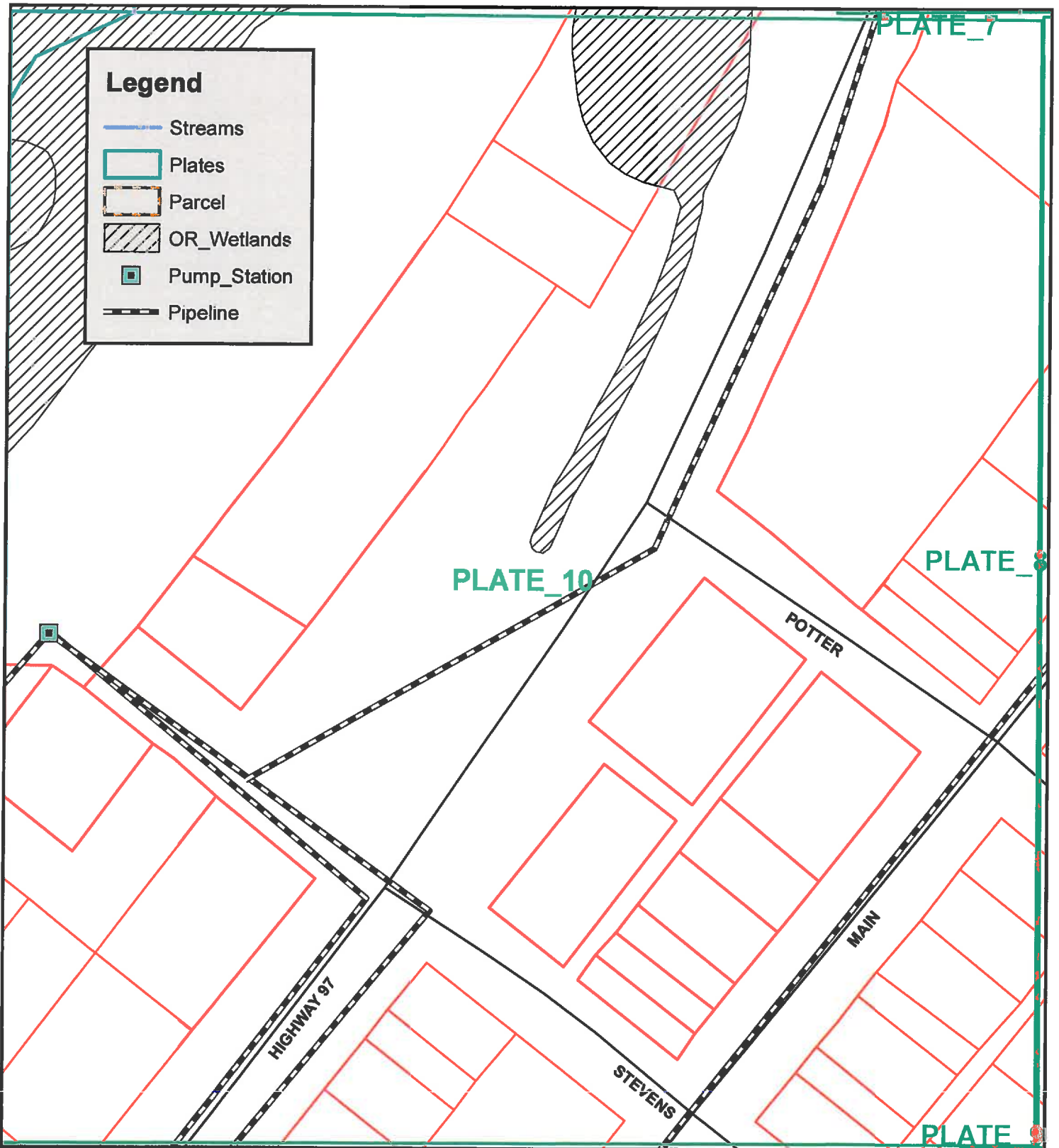
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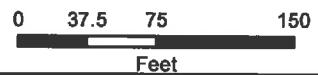
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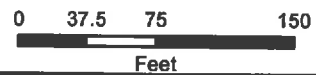
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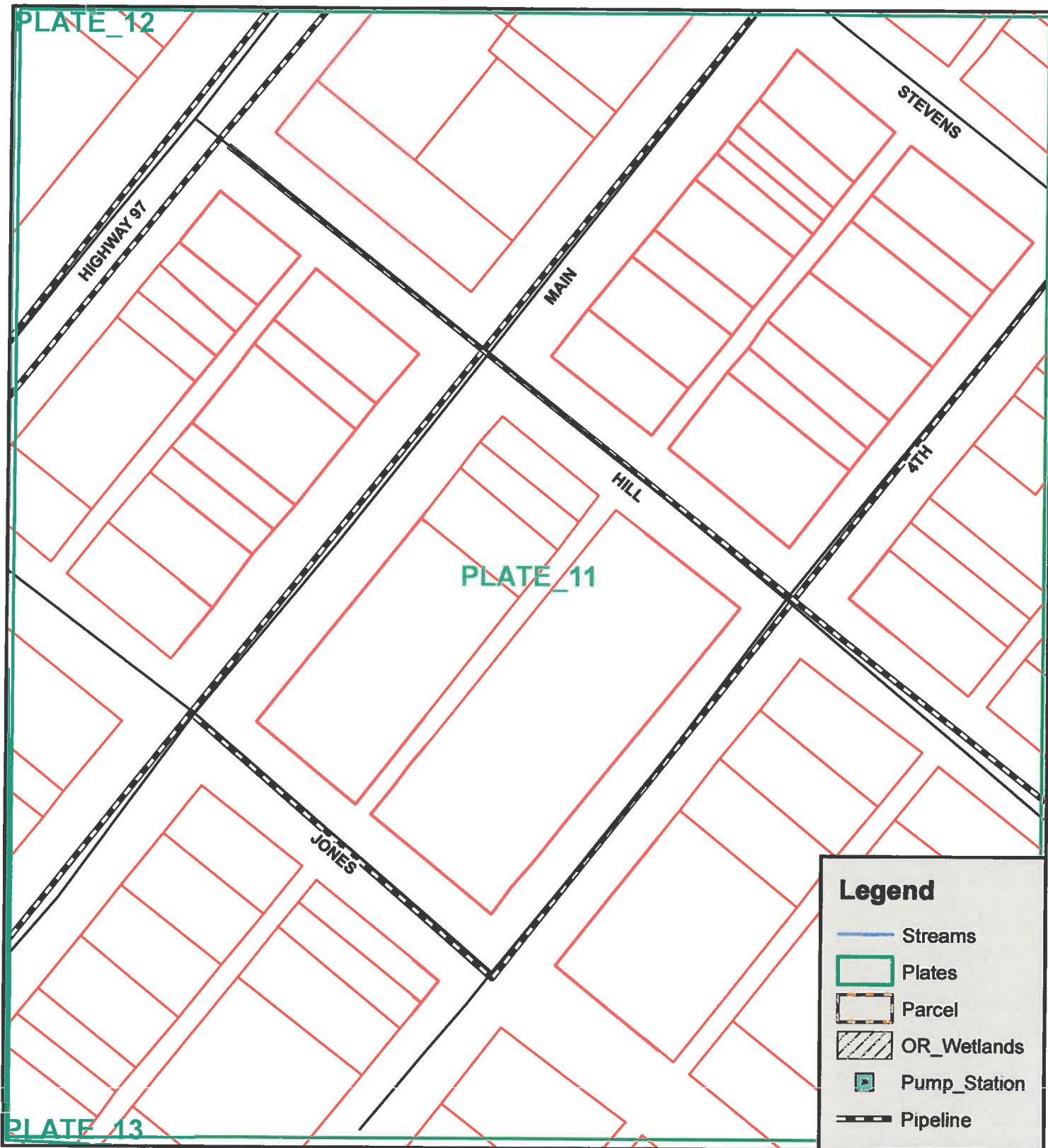
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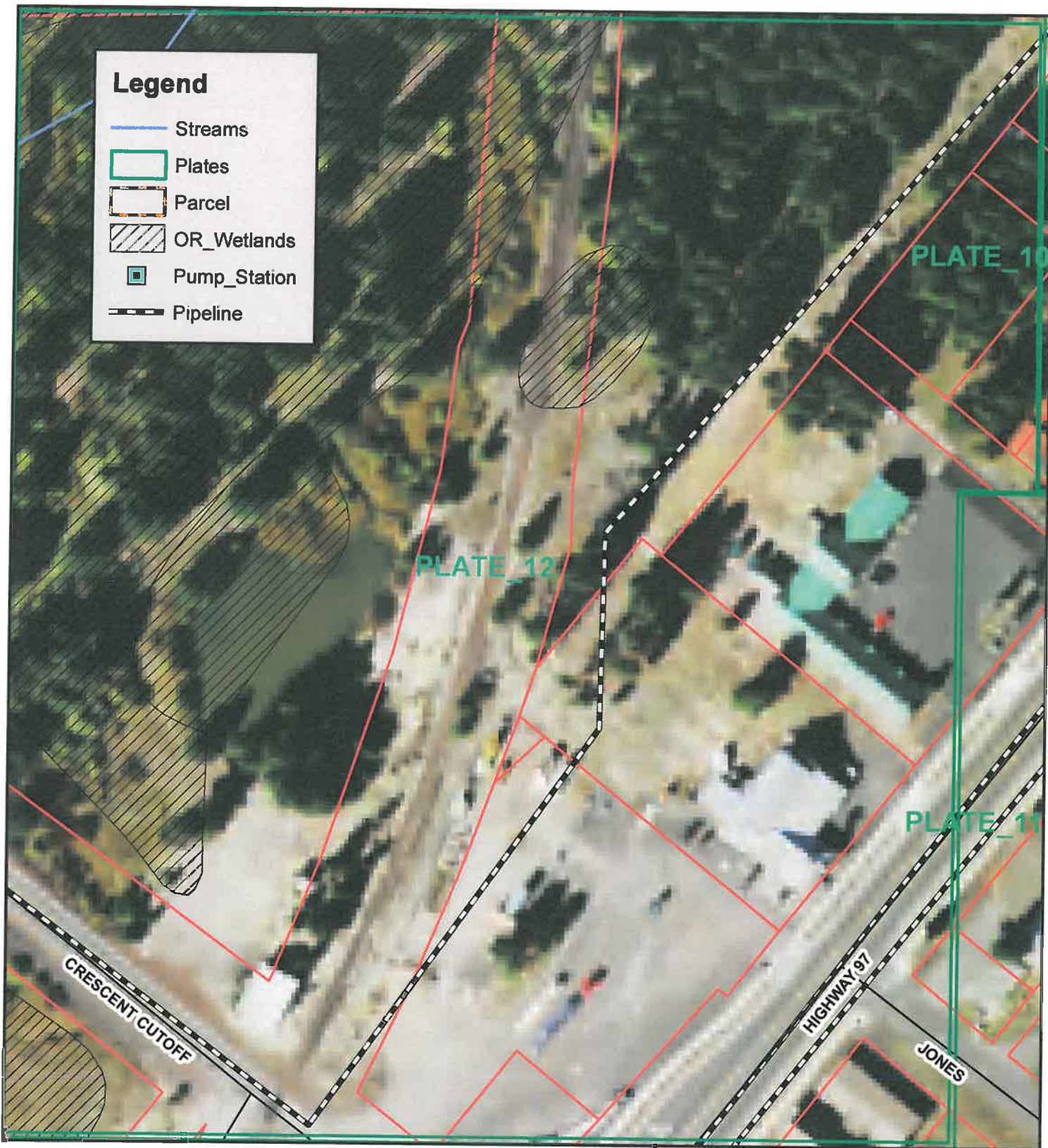
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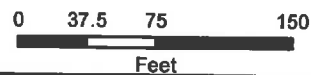
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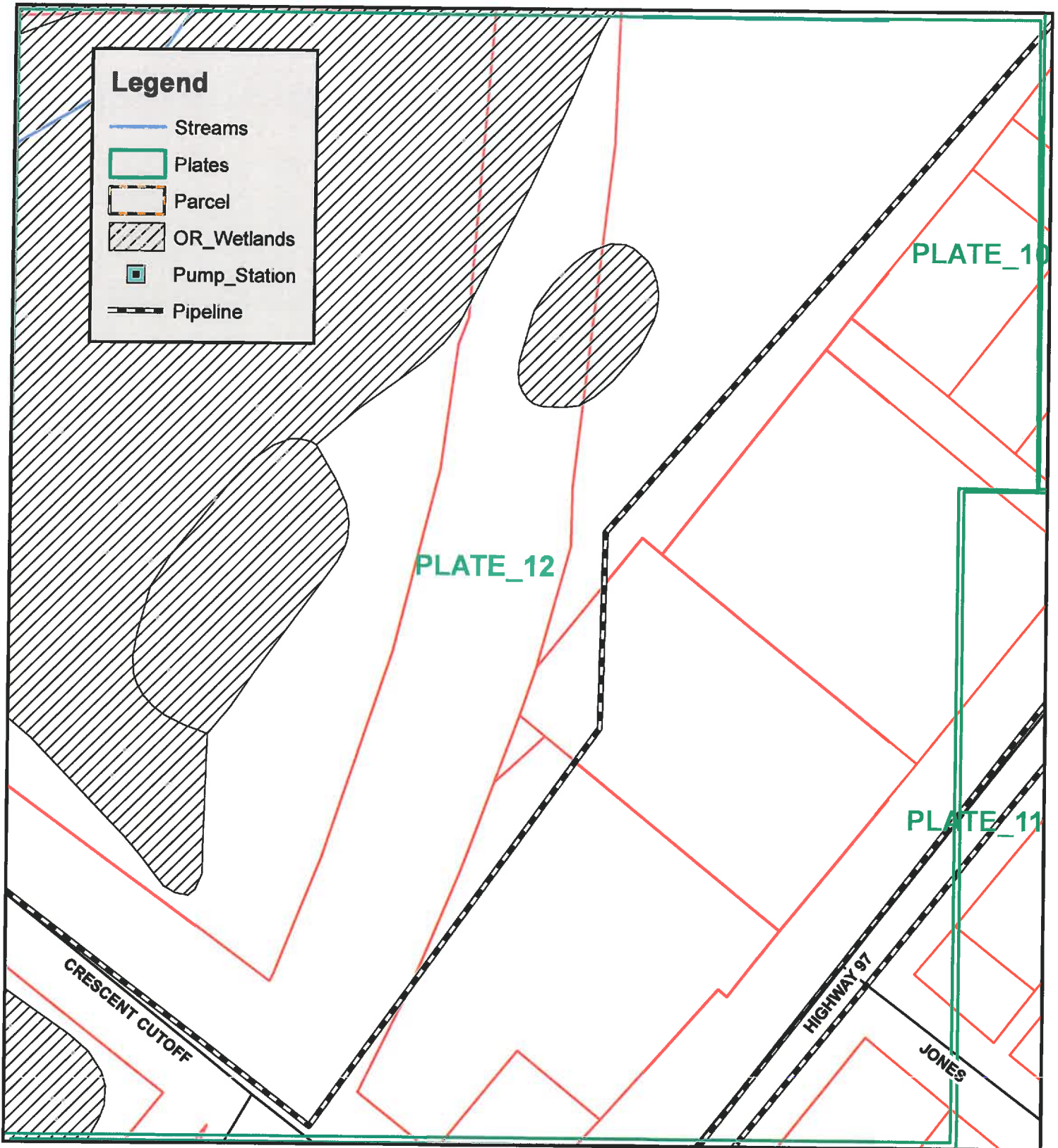
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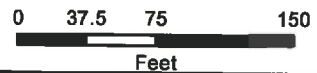
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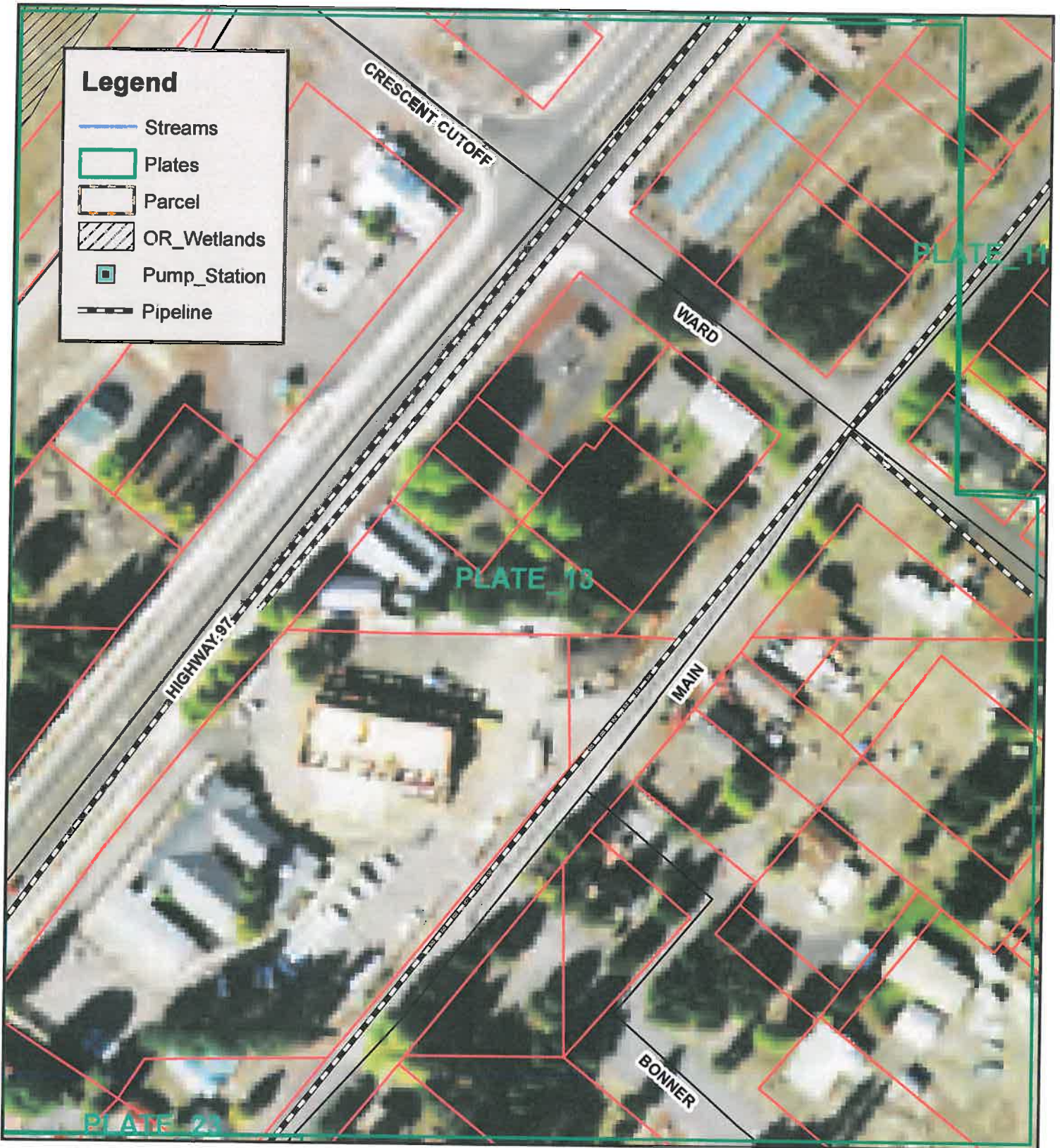
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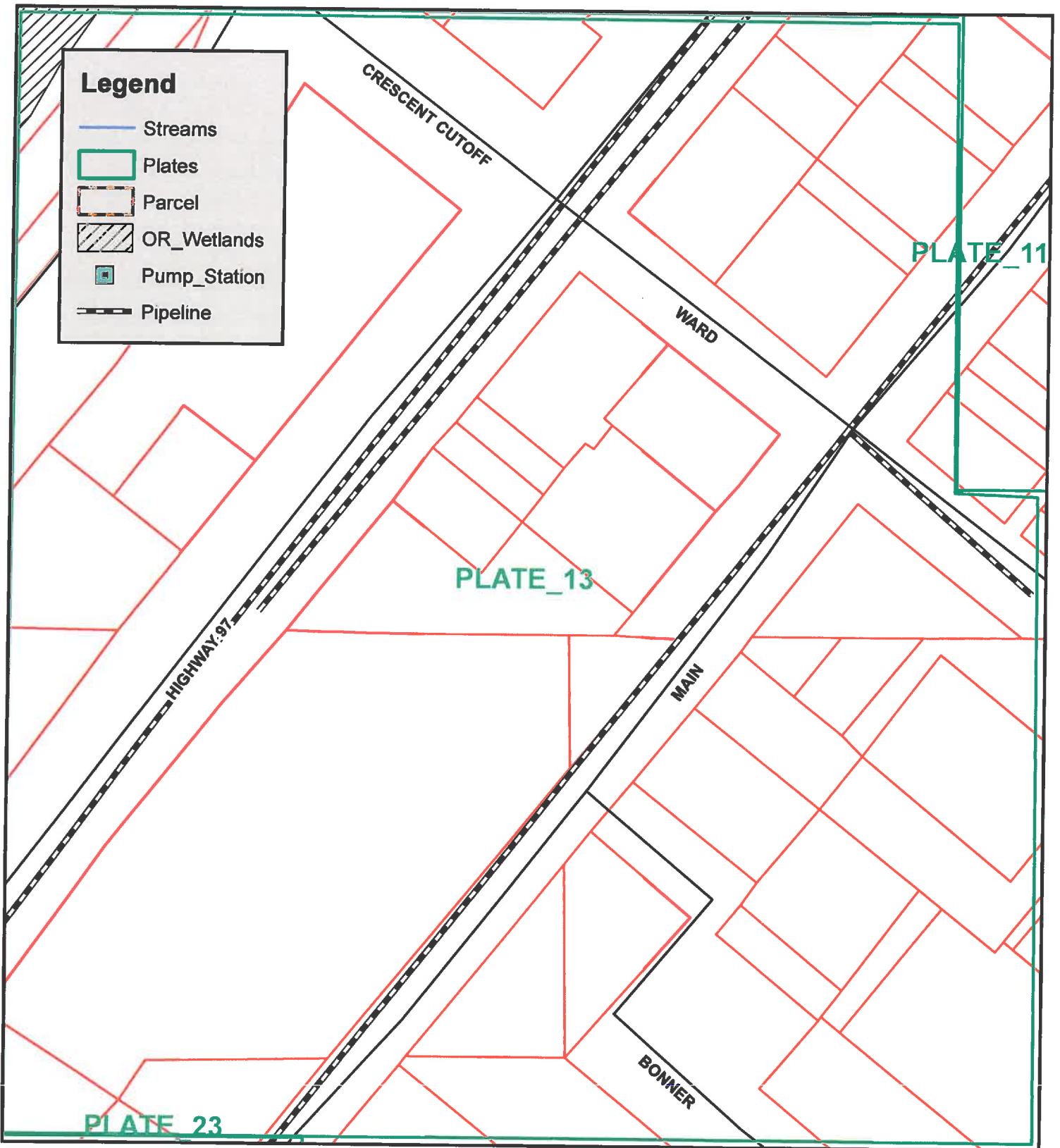
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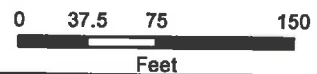
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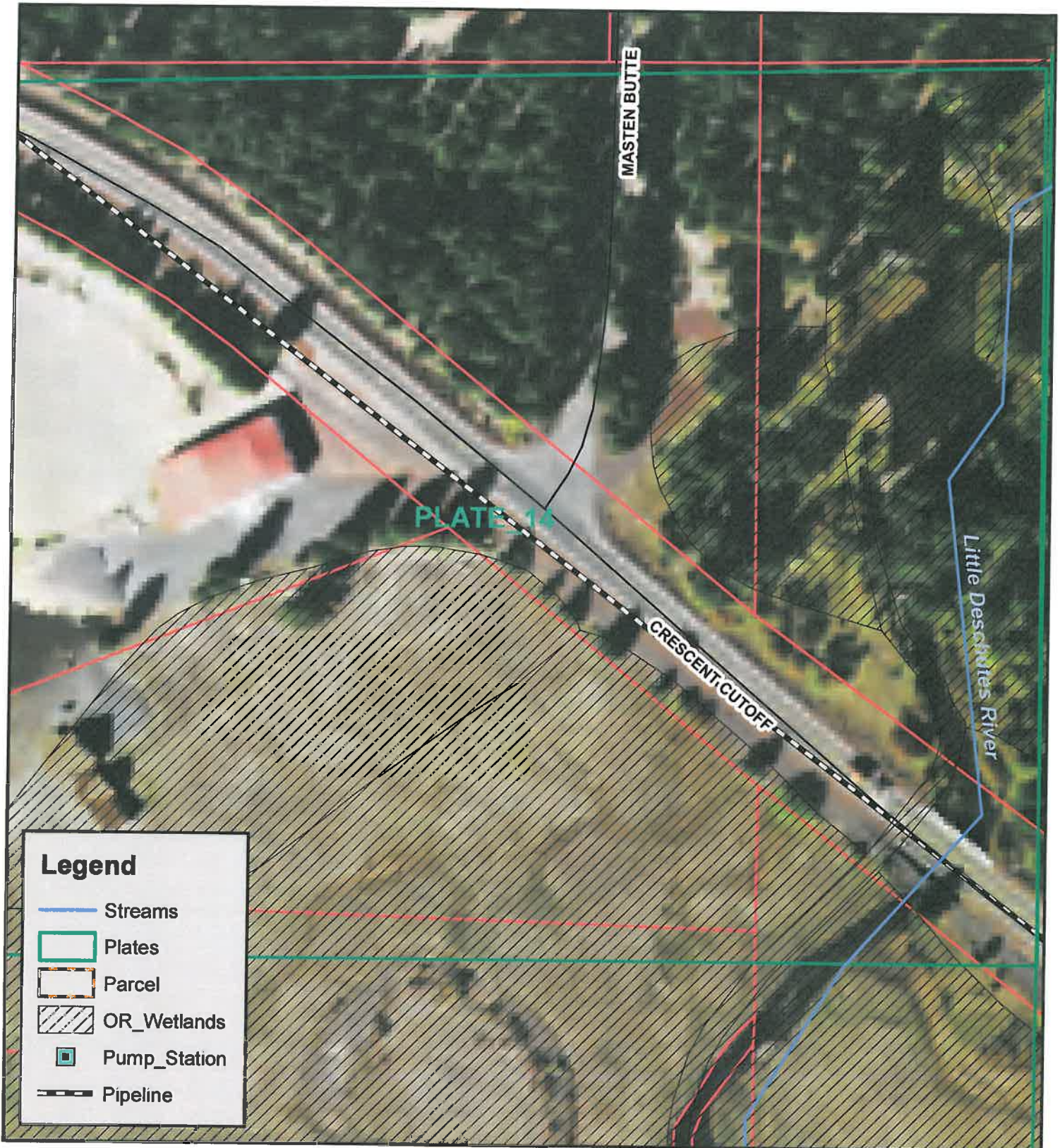
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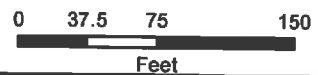
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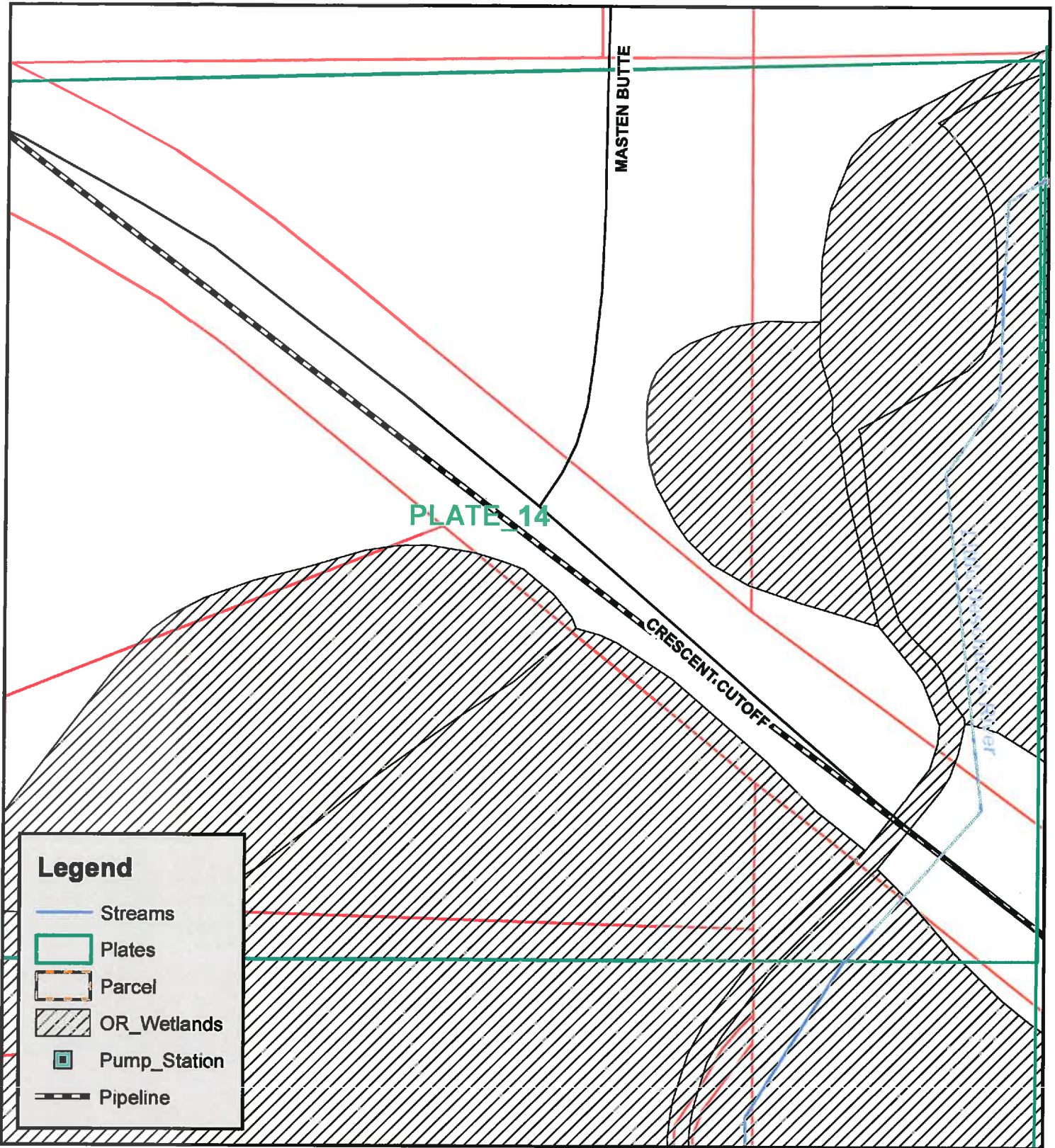
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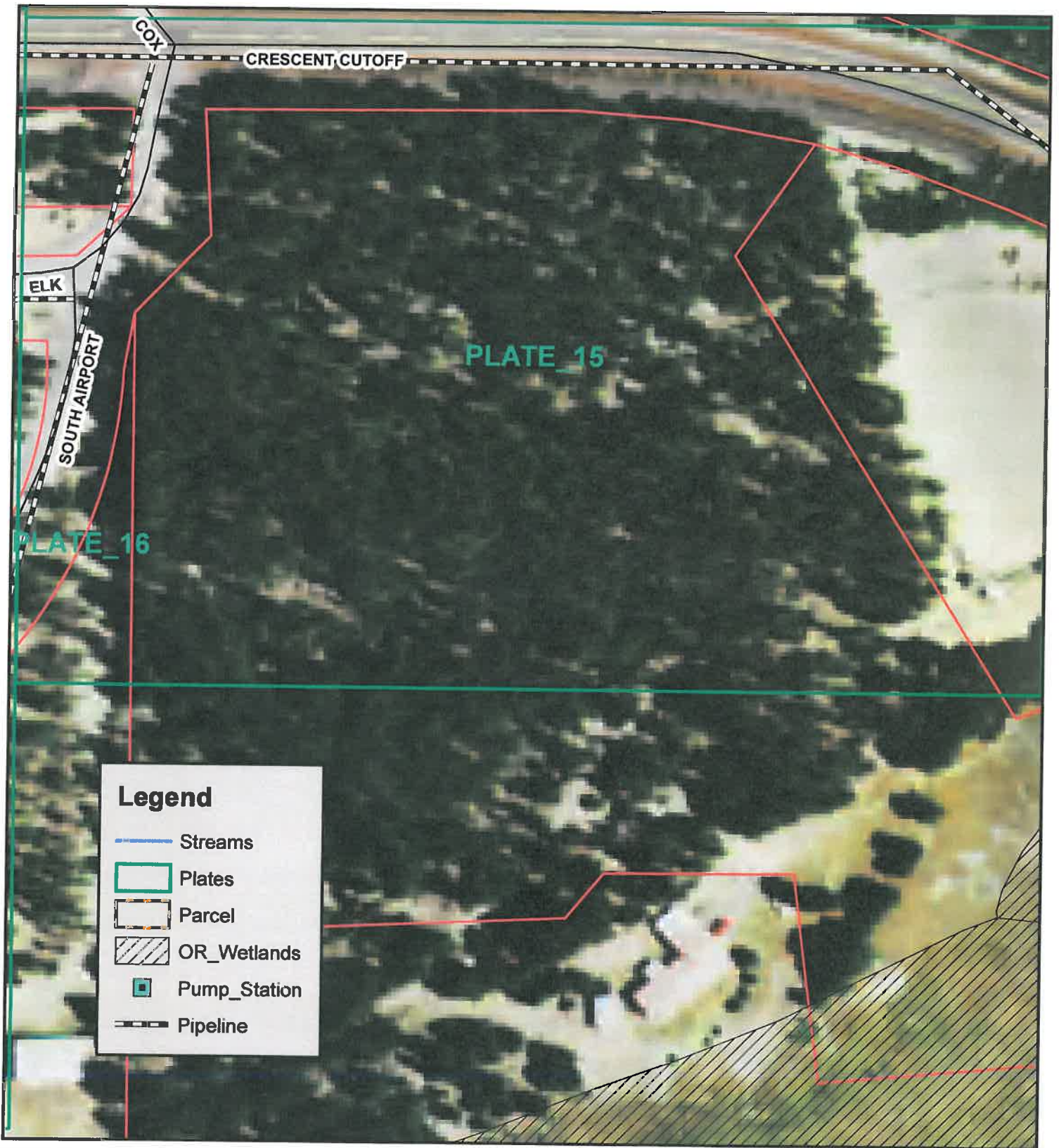
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map







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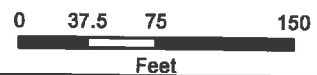
Legend

-  Streams
-  Plates
-  Parcel
-  OR_Wetlands
-  Pump_Station
-  Pipeline

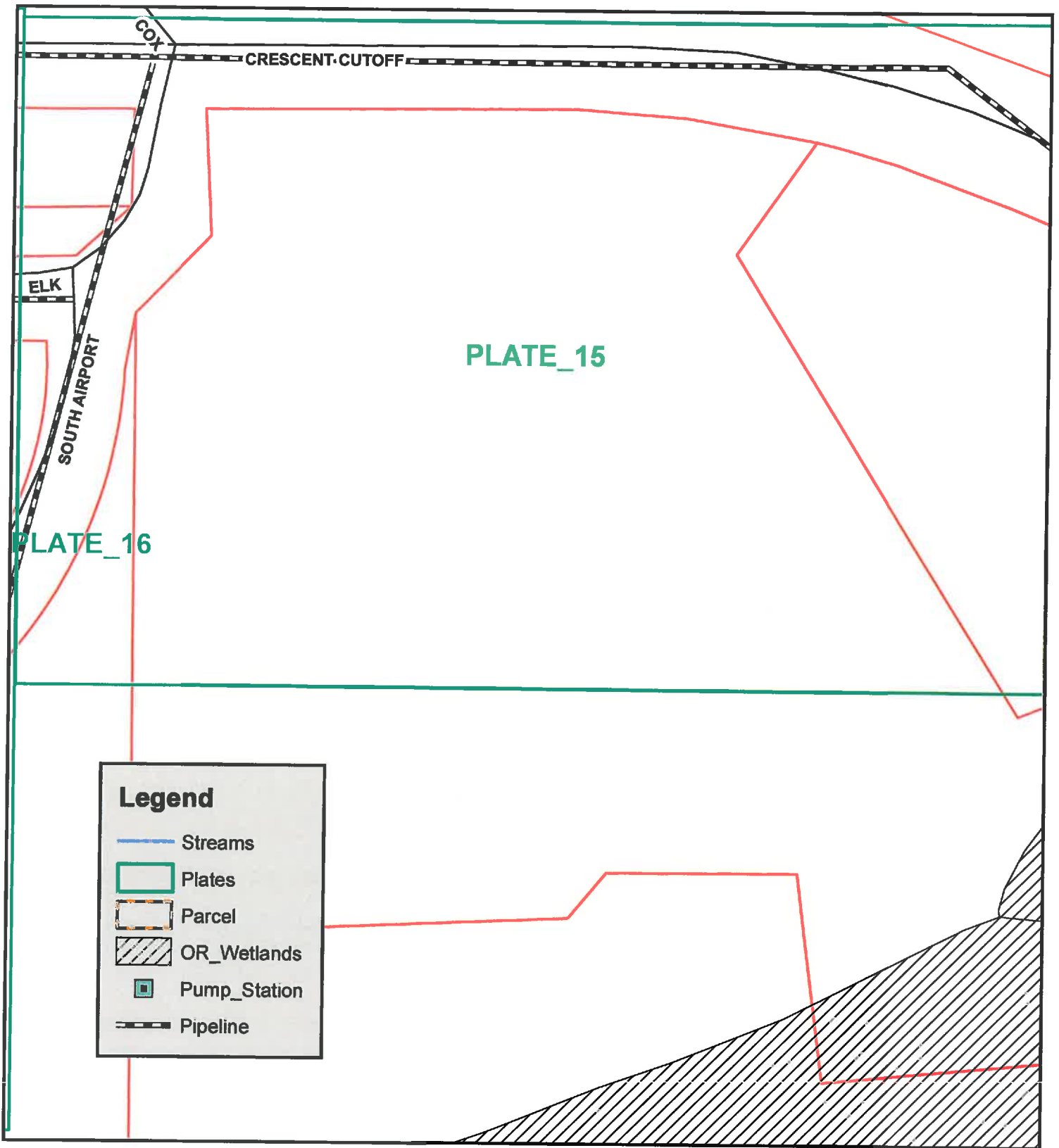
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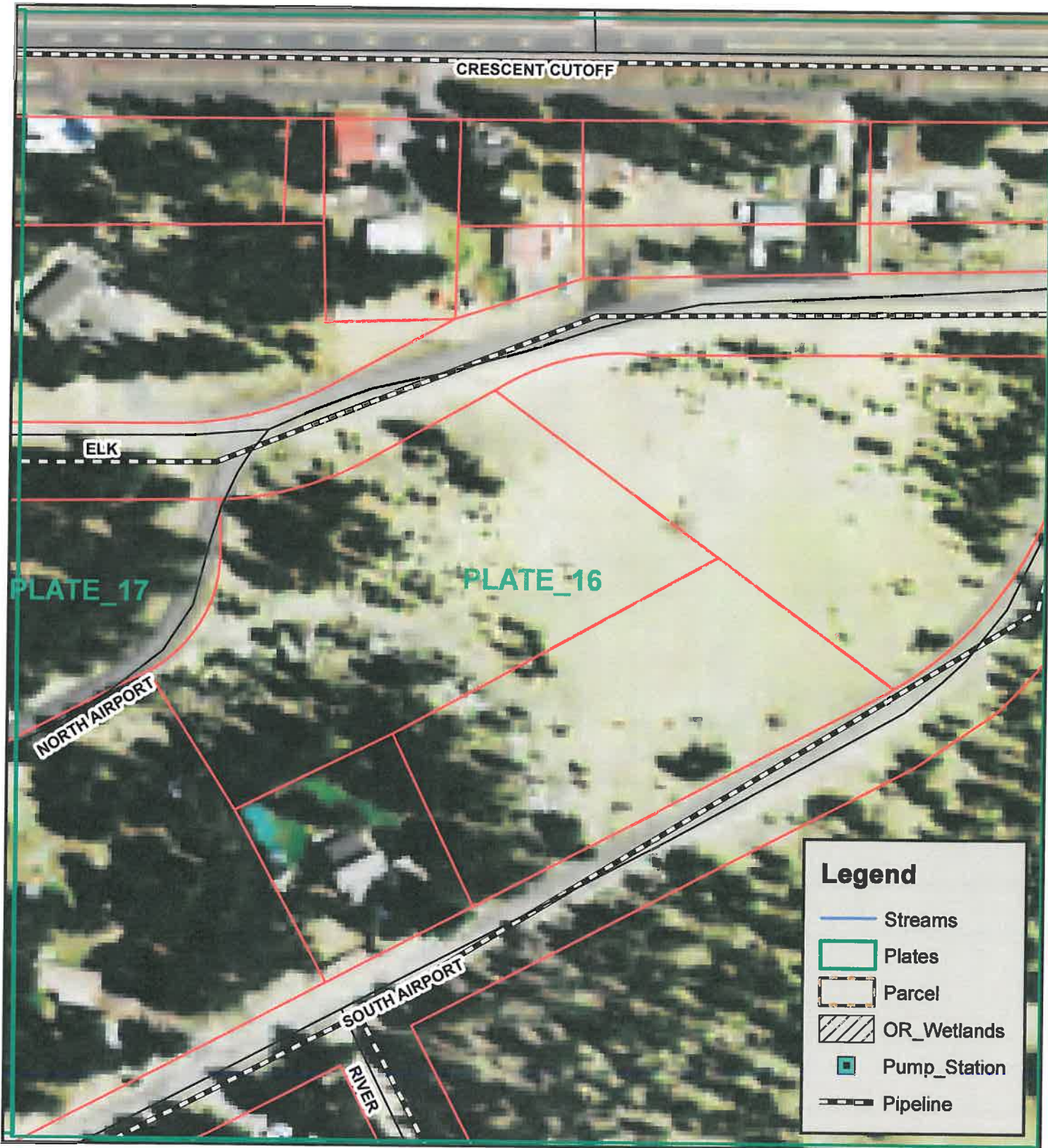
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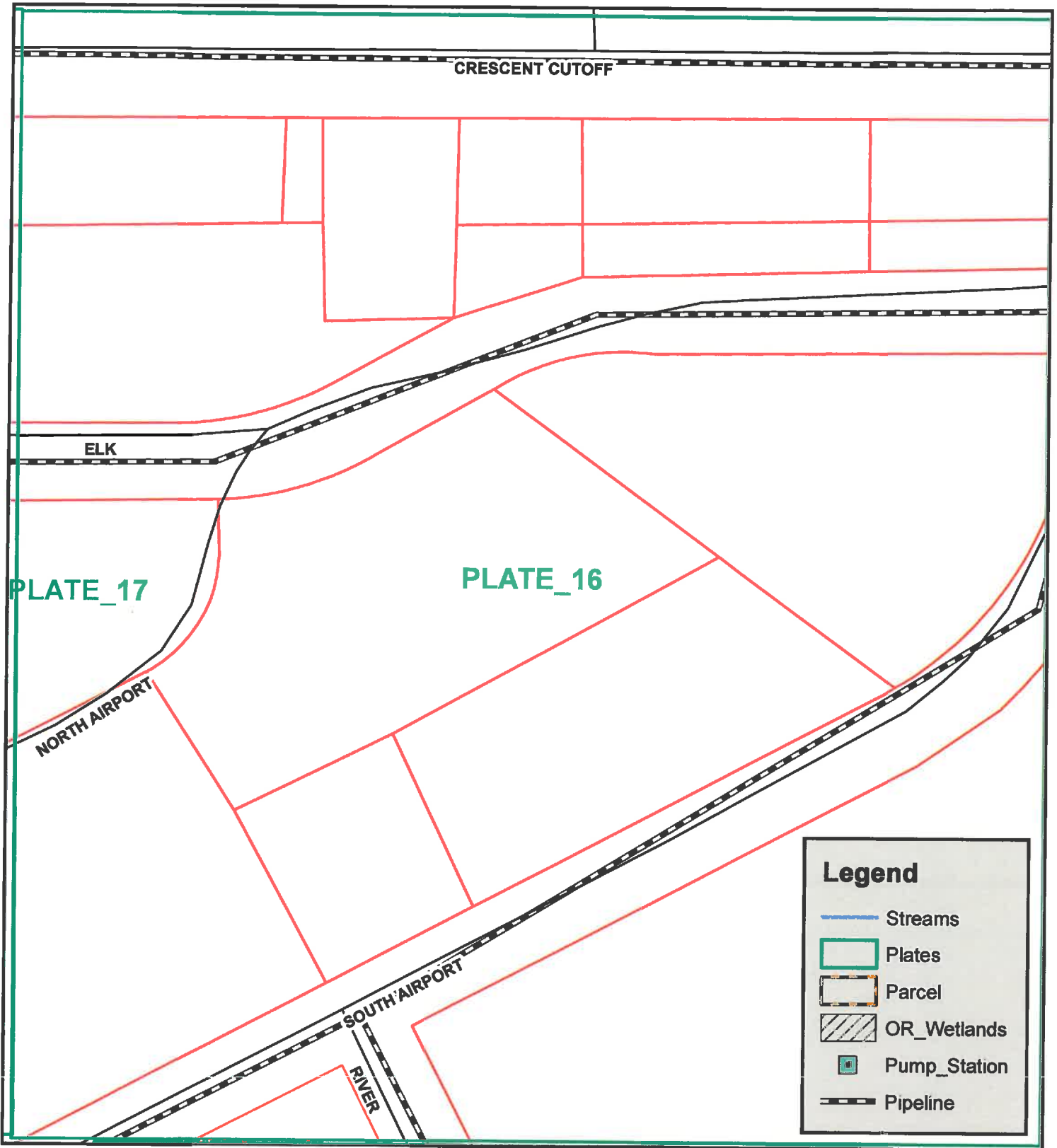
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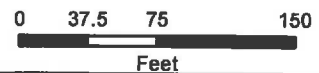
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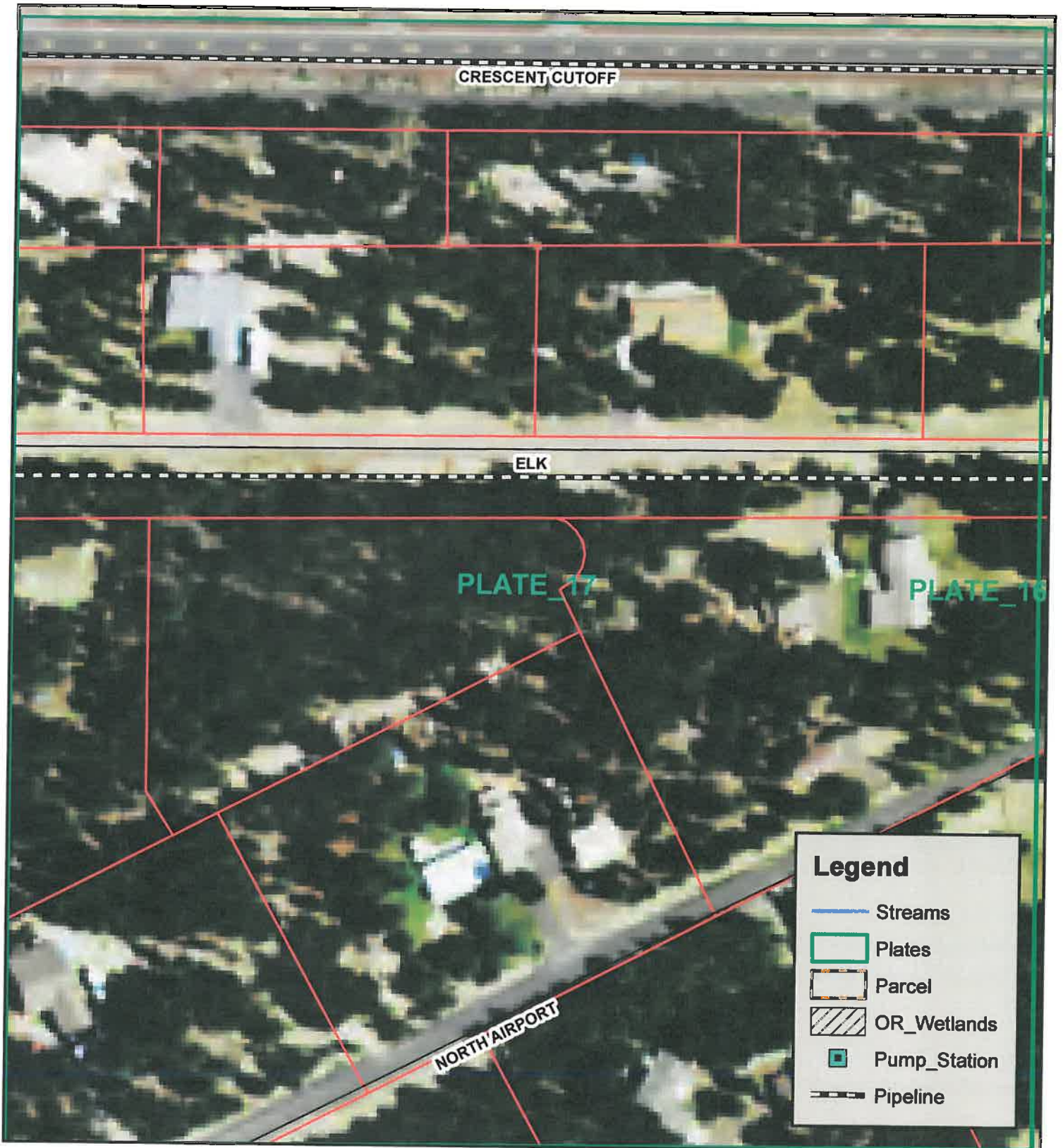
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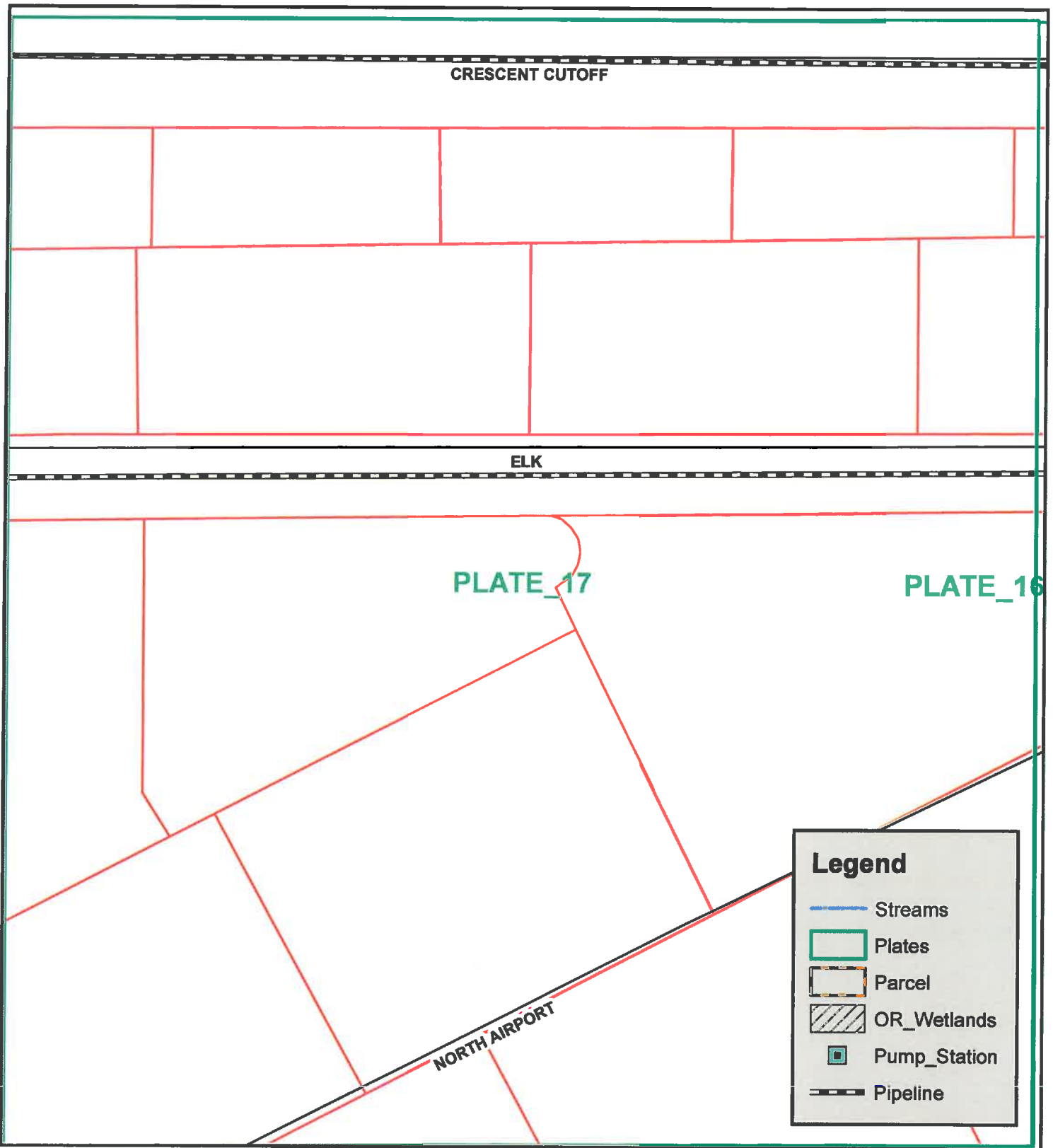
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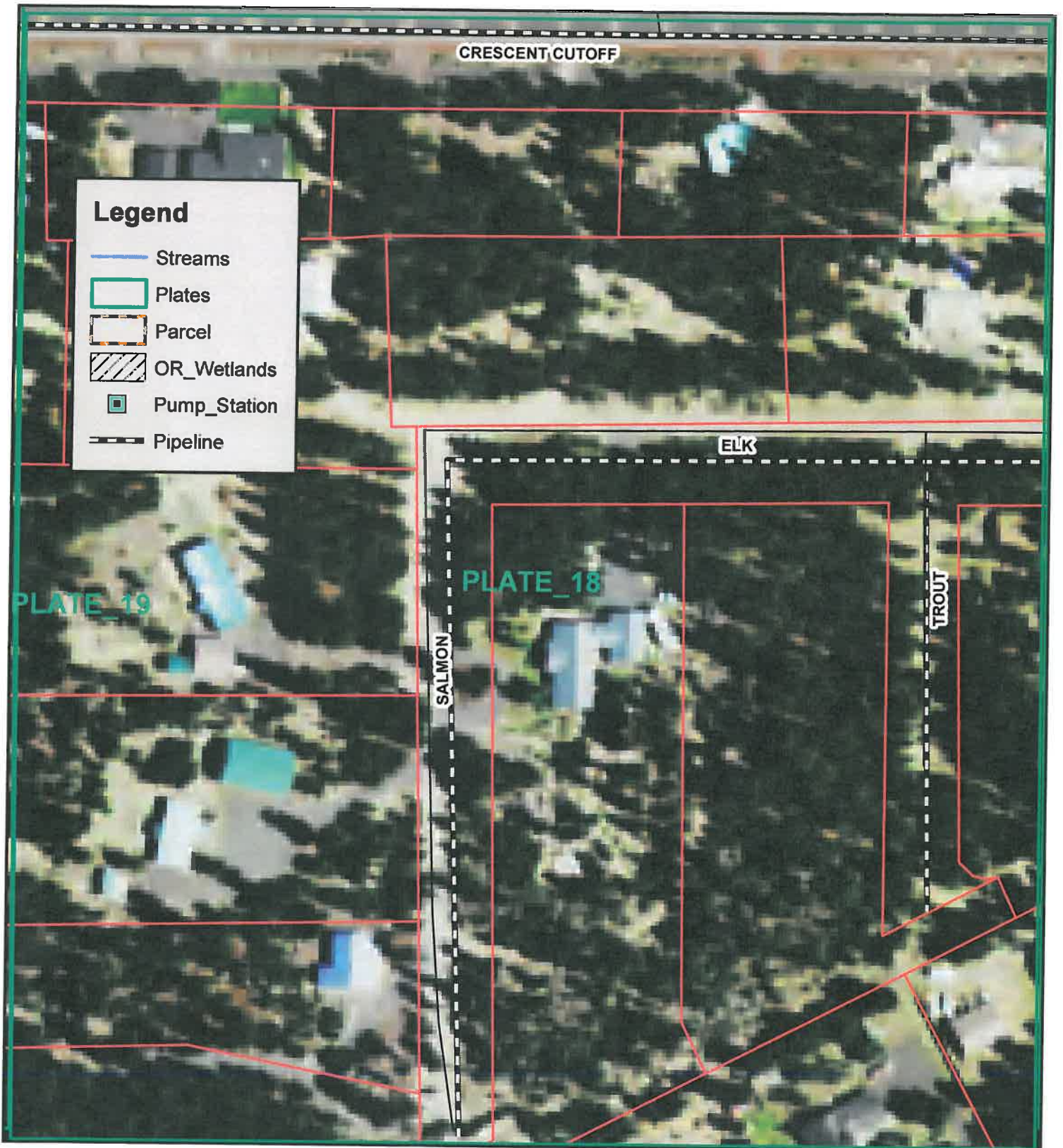
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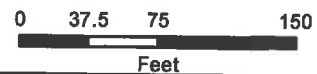
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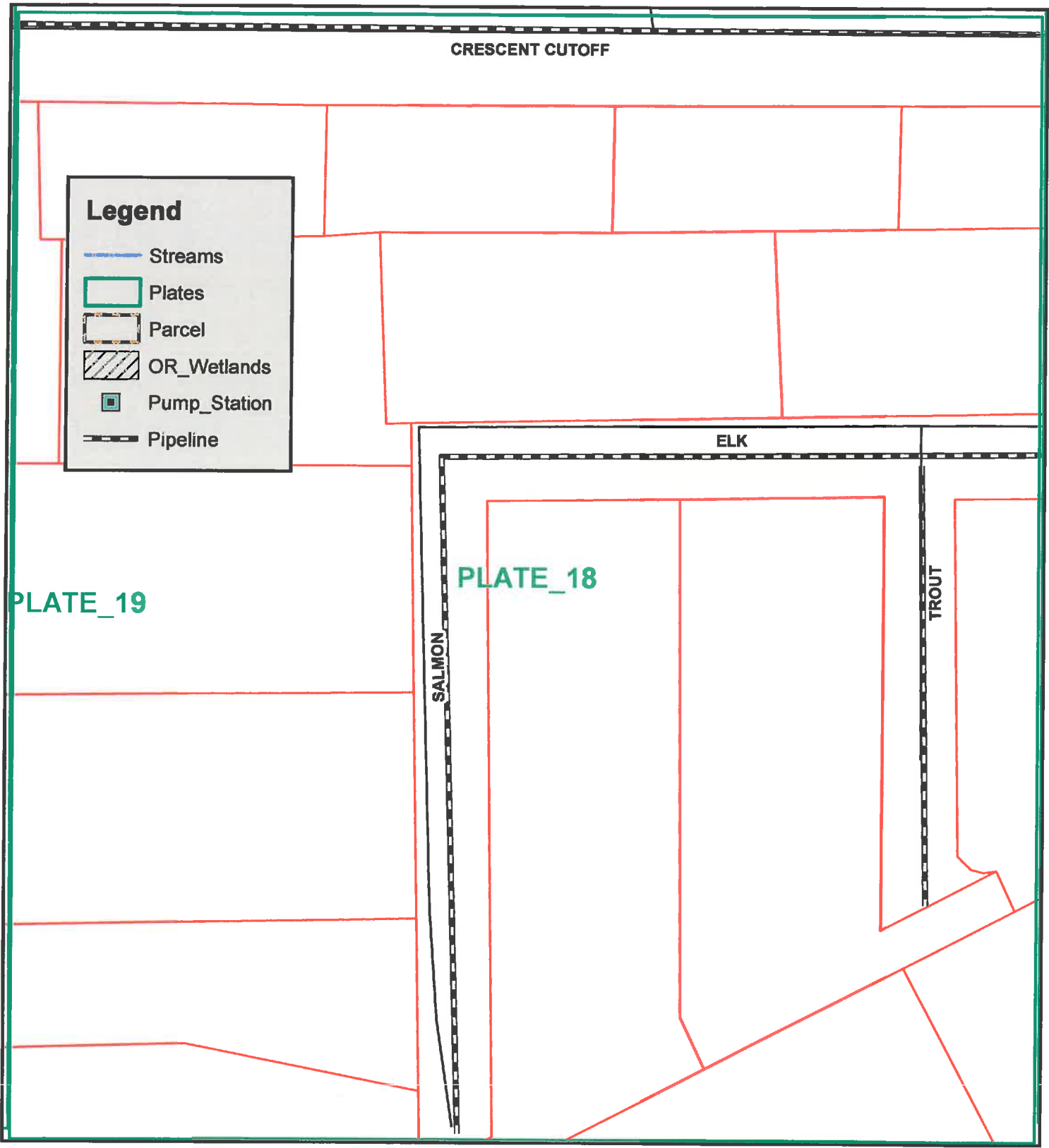
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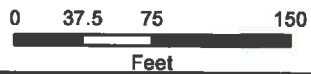
Legend

- Streams
- Plates
- Parcel
- OR_Wetlands
- Pump_Station
- Pipeline

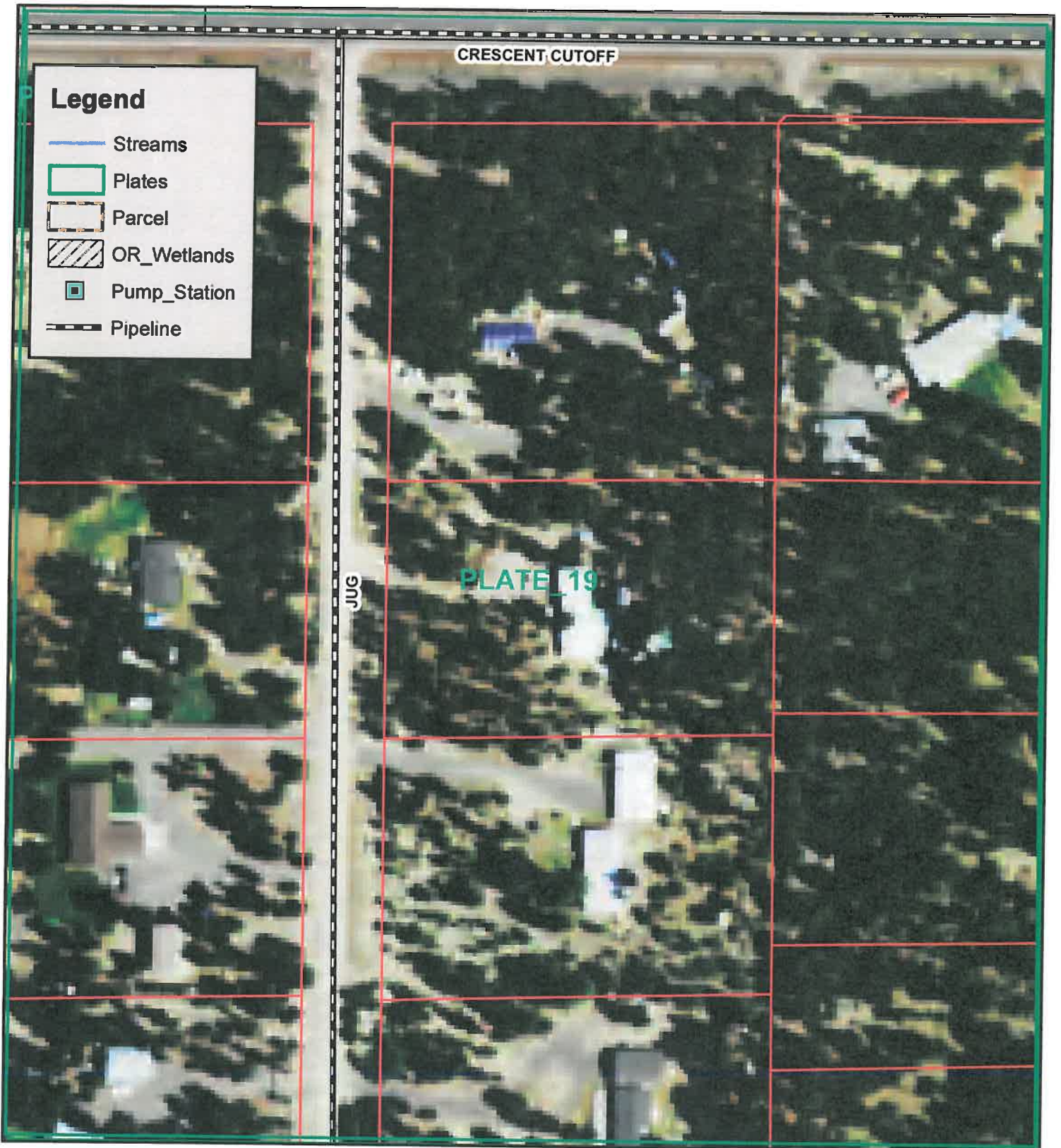
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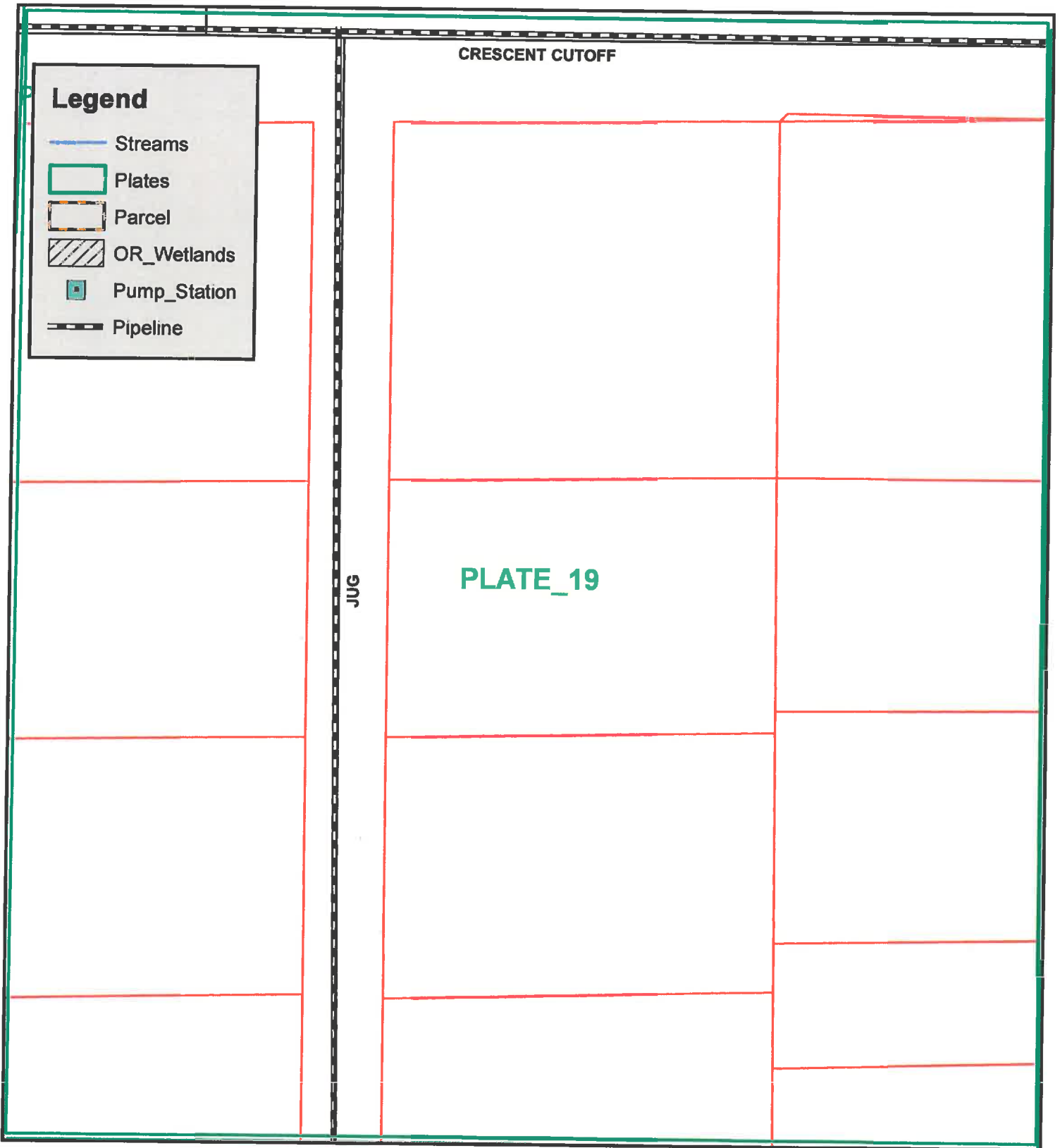
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Wastewater System Improvements**

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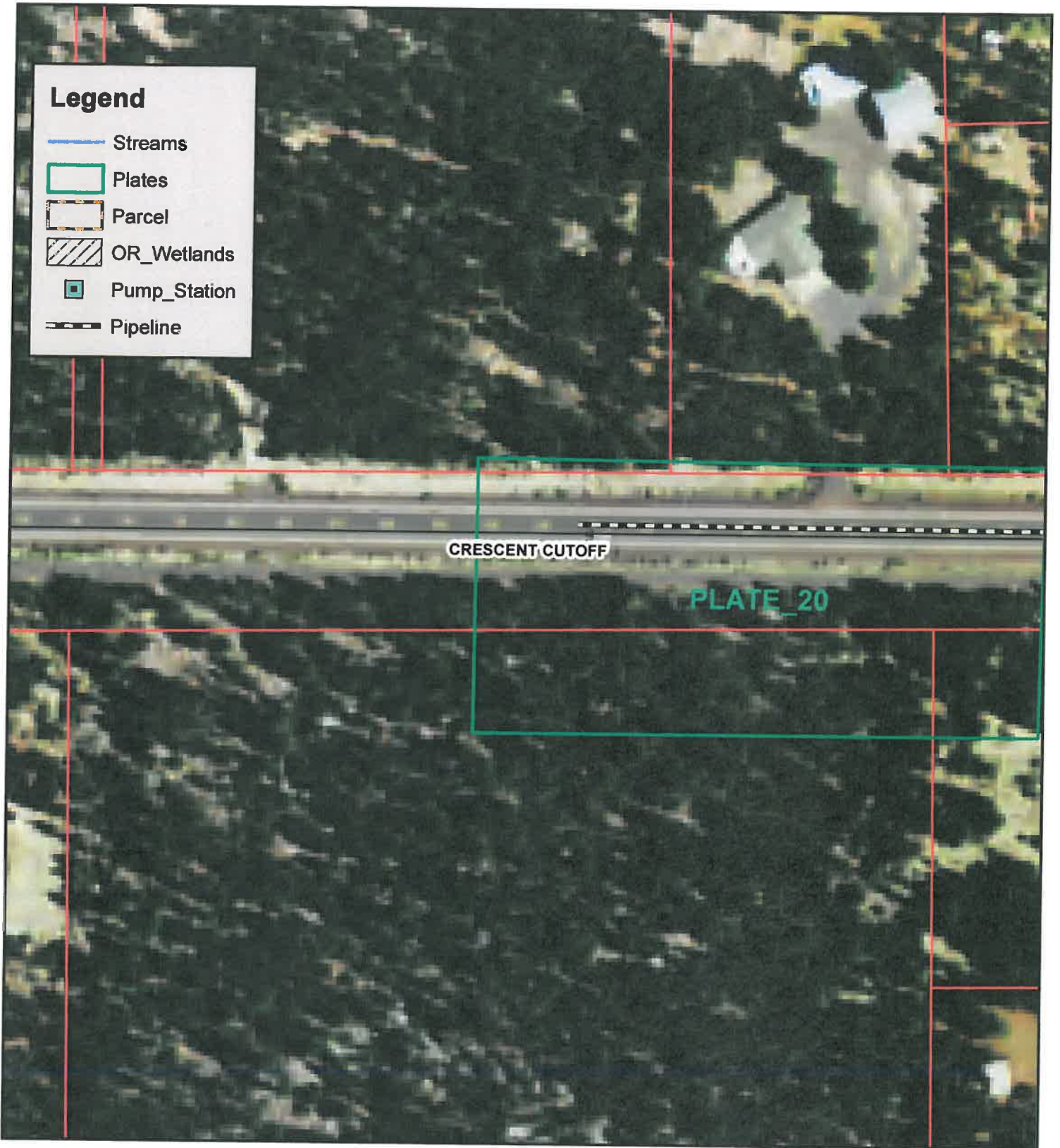
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





Plate Map

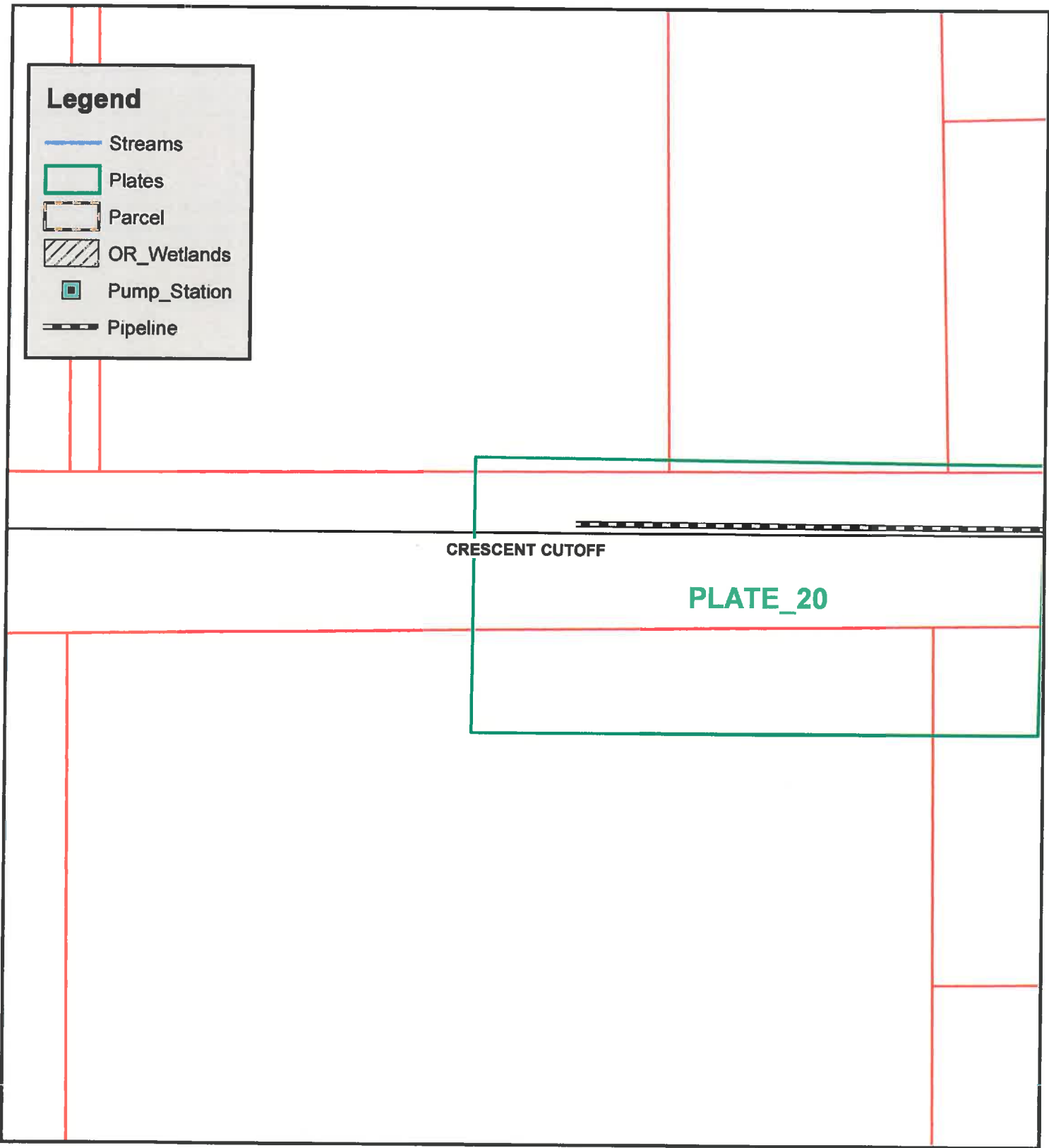
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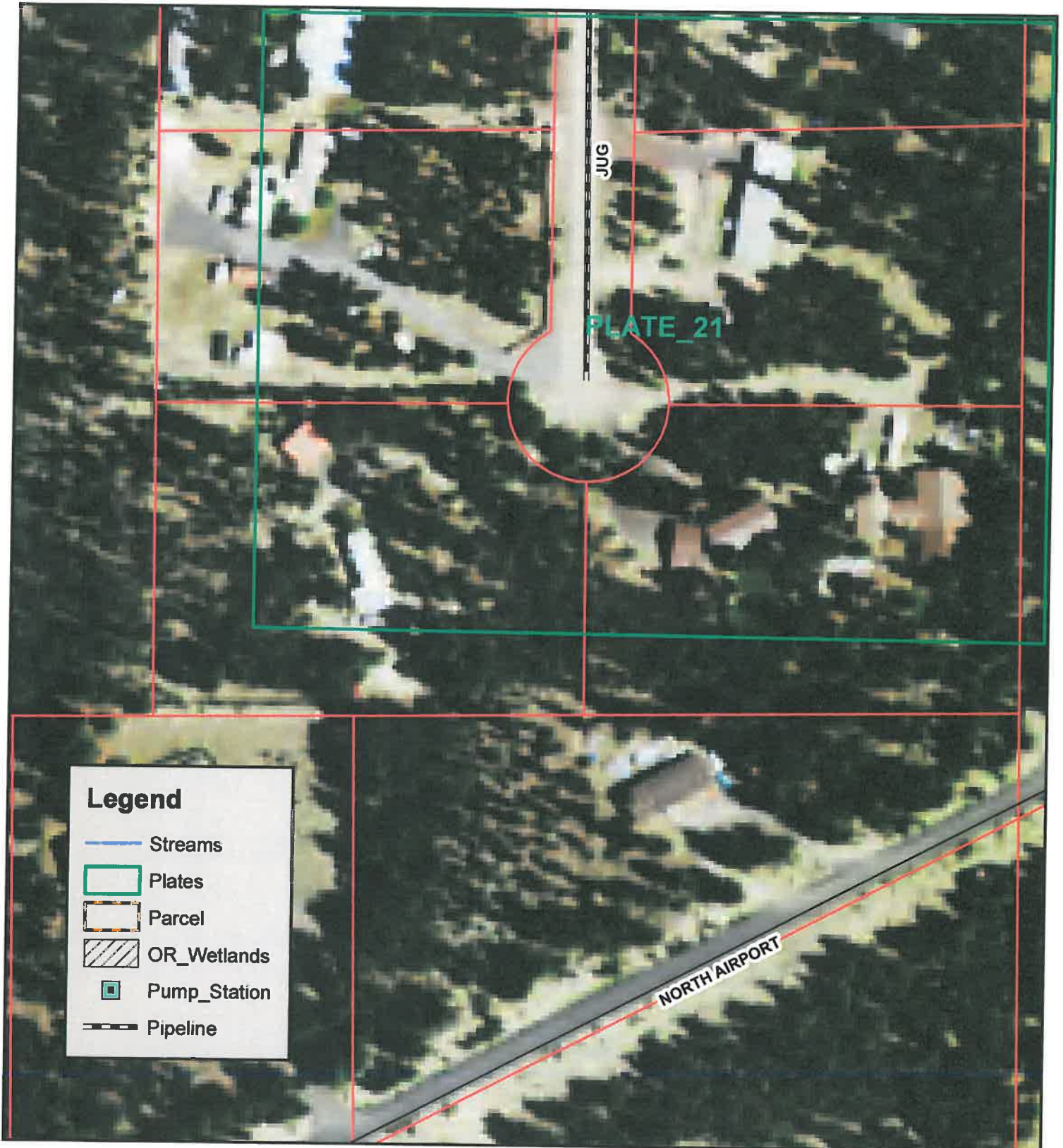
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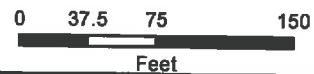
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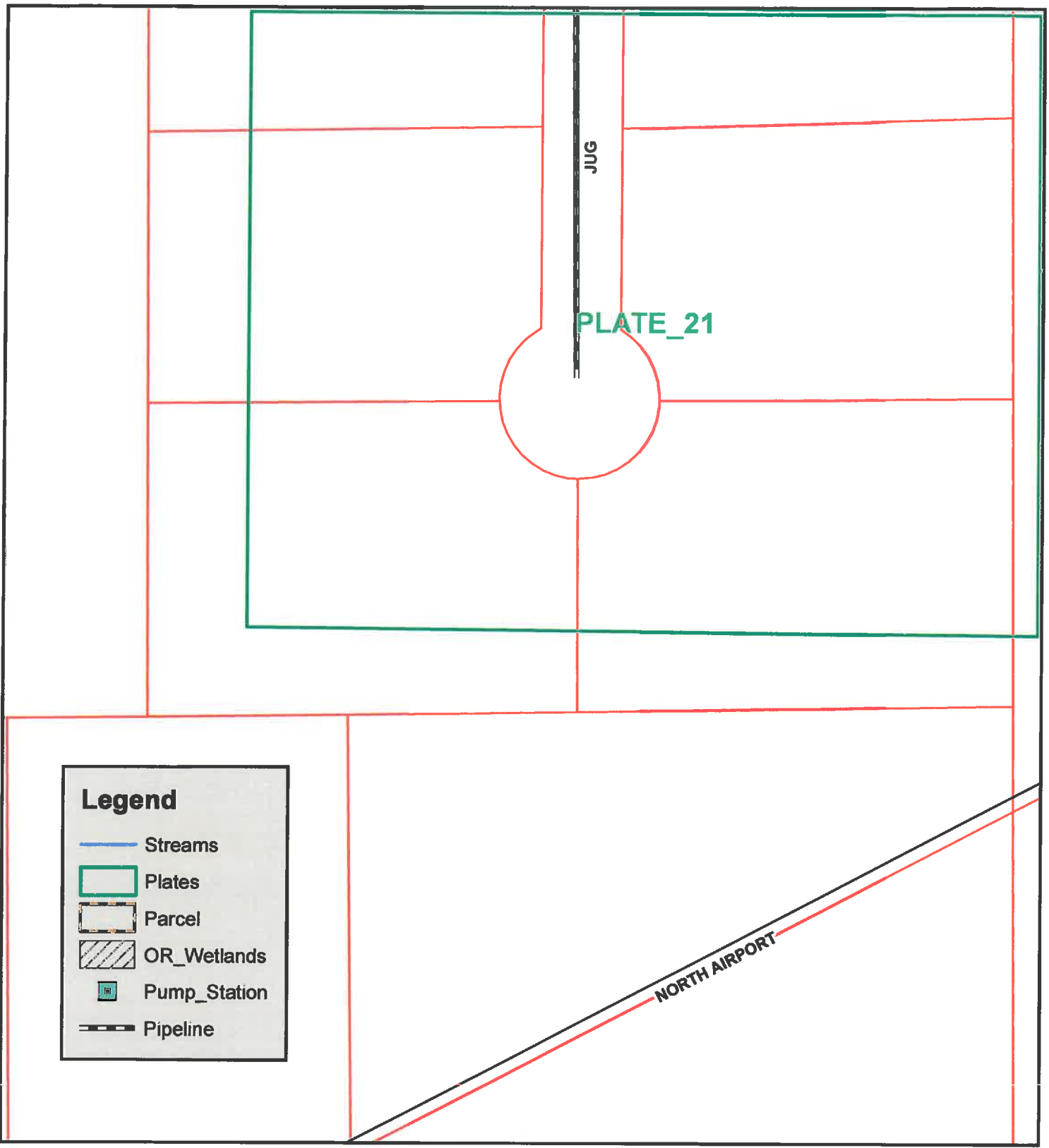
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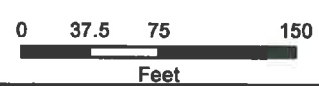


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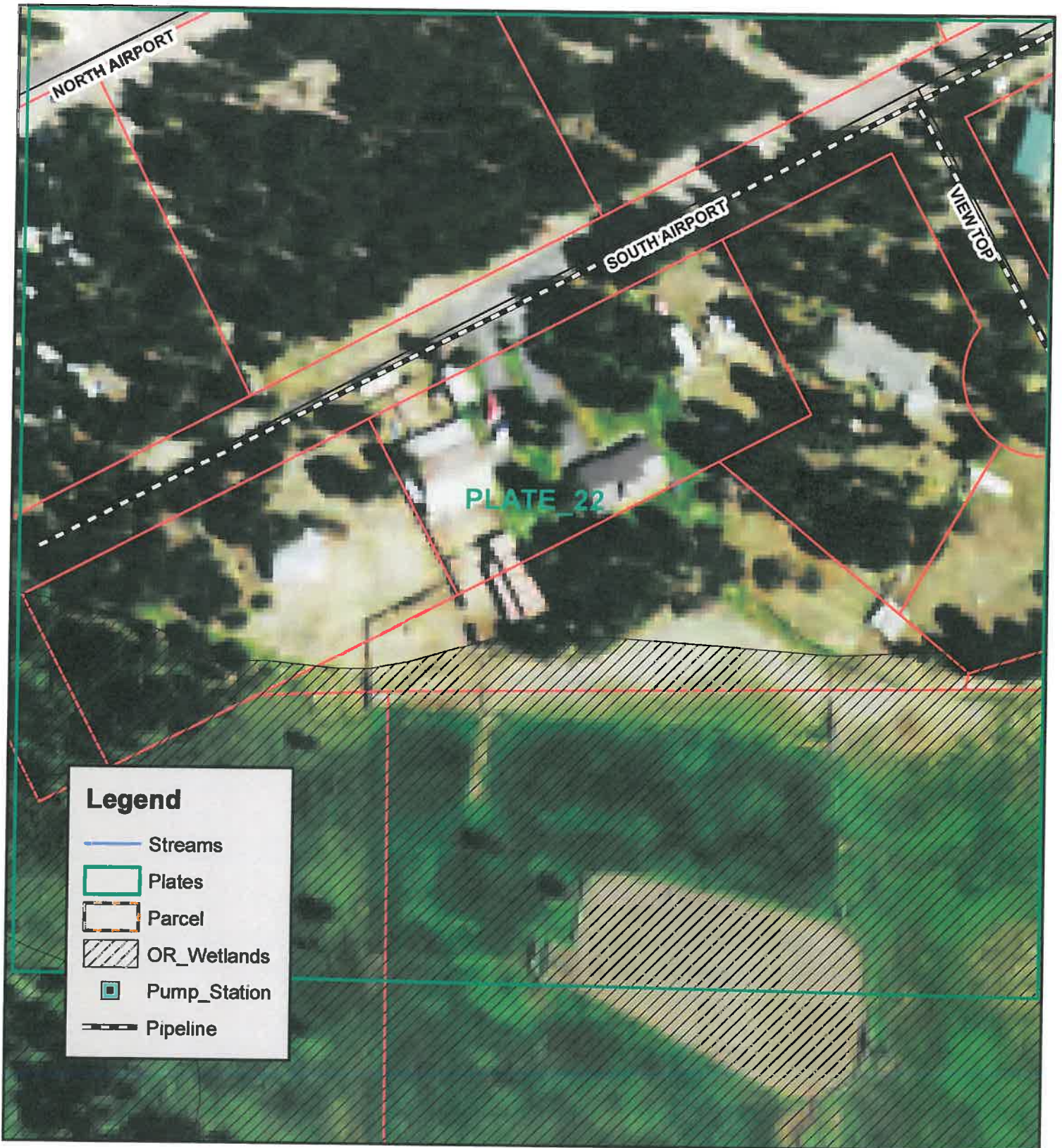
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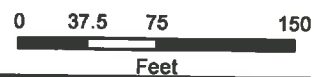
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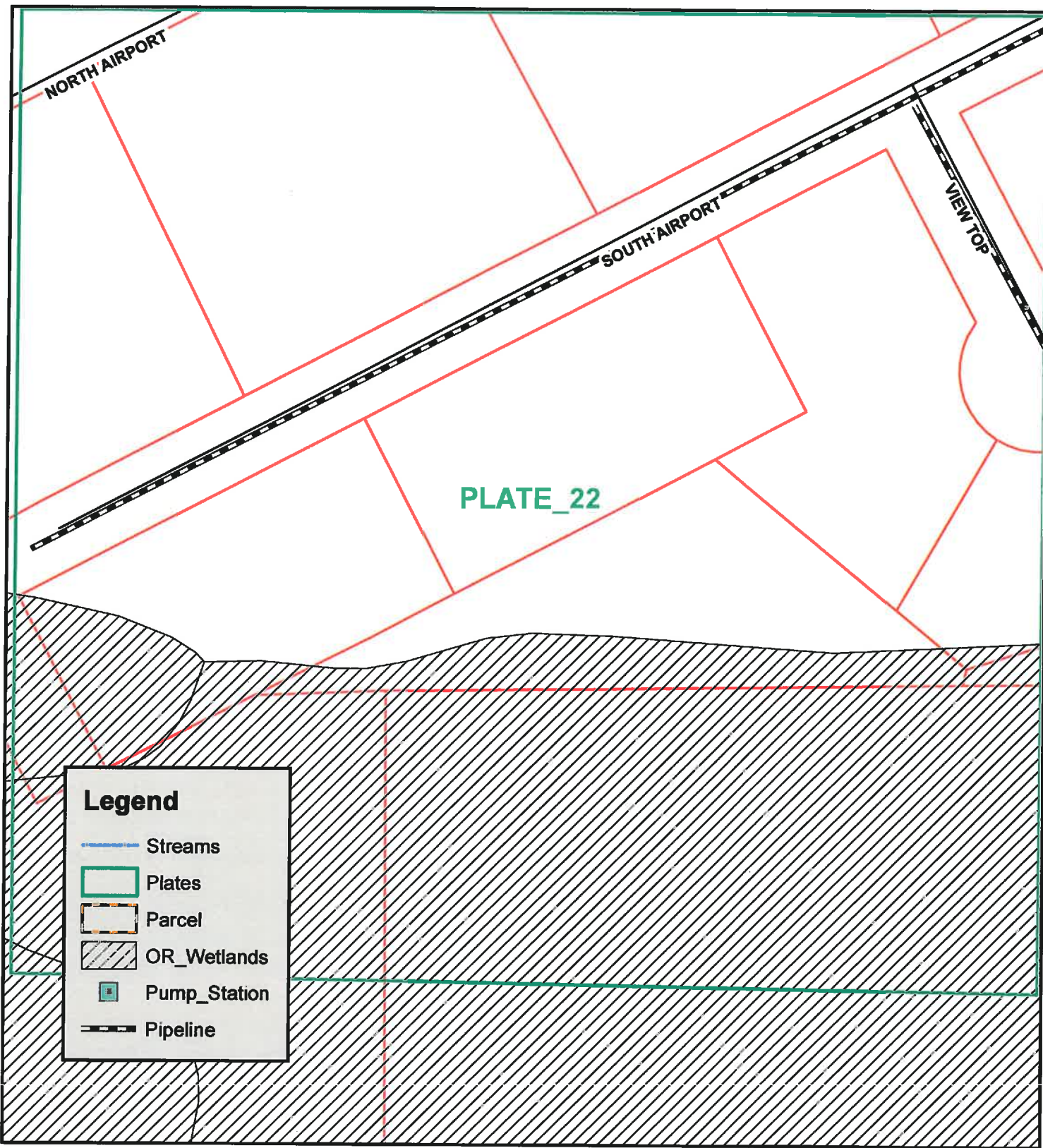
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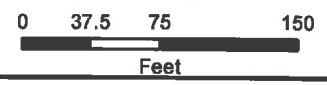


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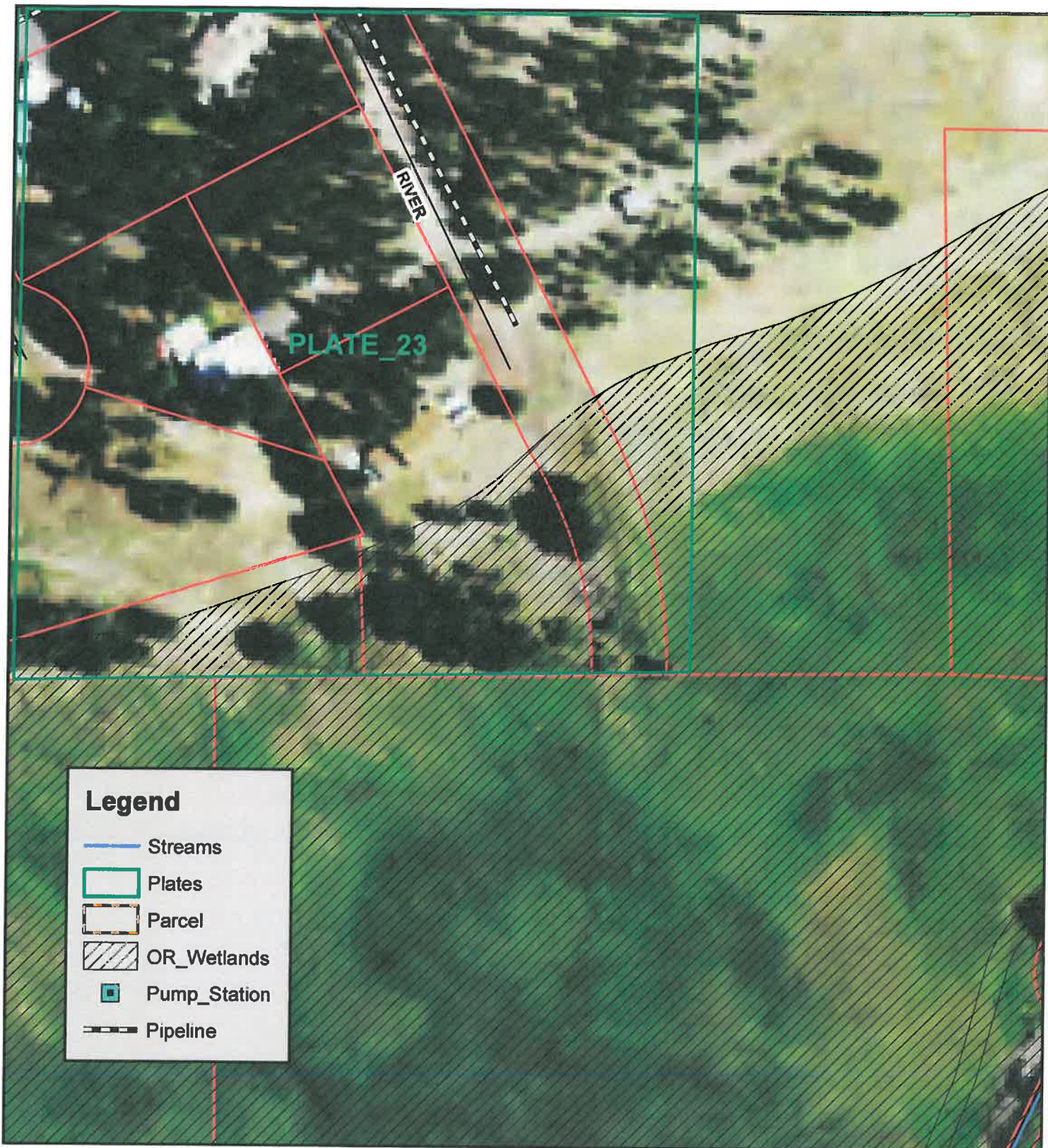
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map



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Map Created By: Ruth Olsen
Map Created On: December 14, 2015



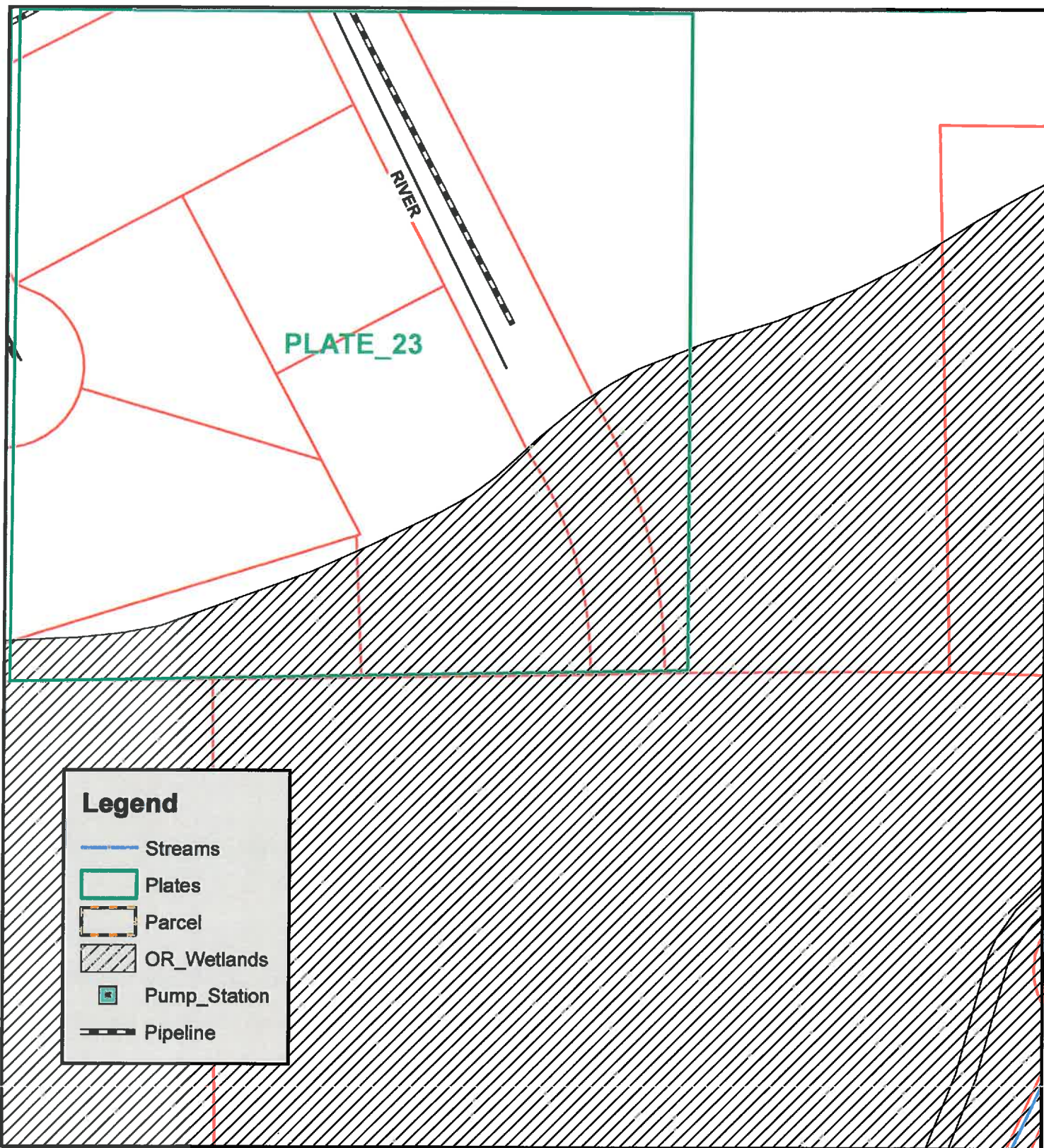
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map







Map Created By: Ruth Olsen
Map Created On: December 14, 2015



Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2014. Reproduced by Rabe Consulting for the purpose of this document.



Legend

-  Streams
-  Plates
-  Parcel
-  OR_Wetlands
-  Pump_Station
-  Pipeline

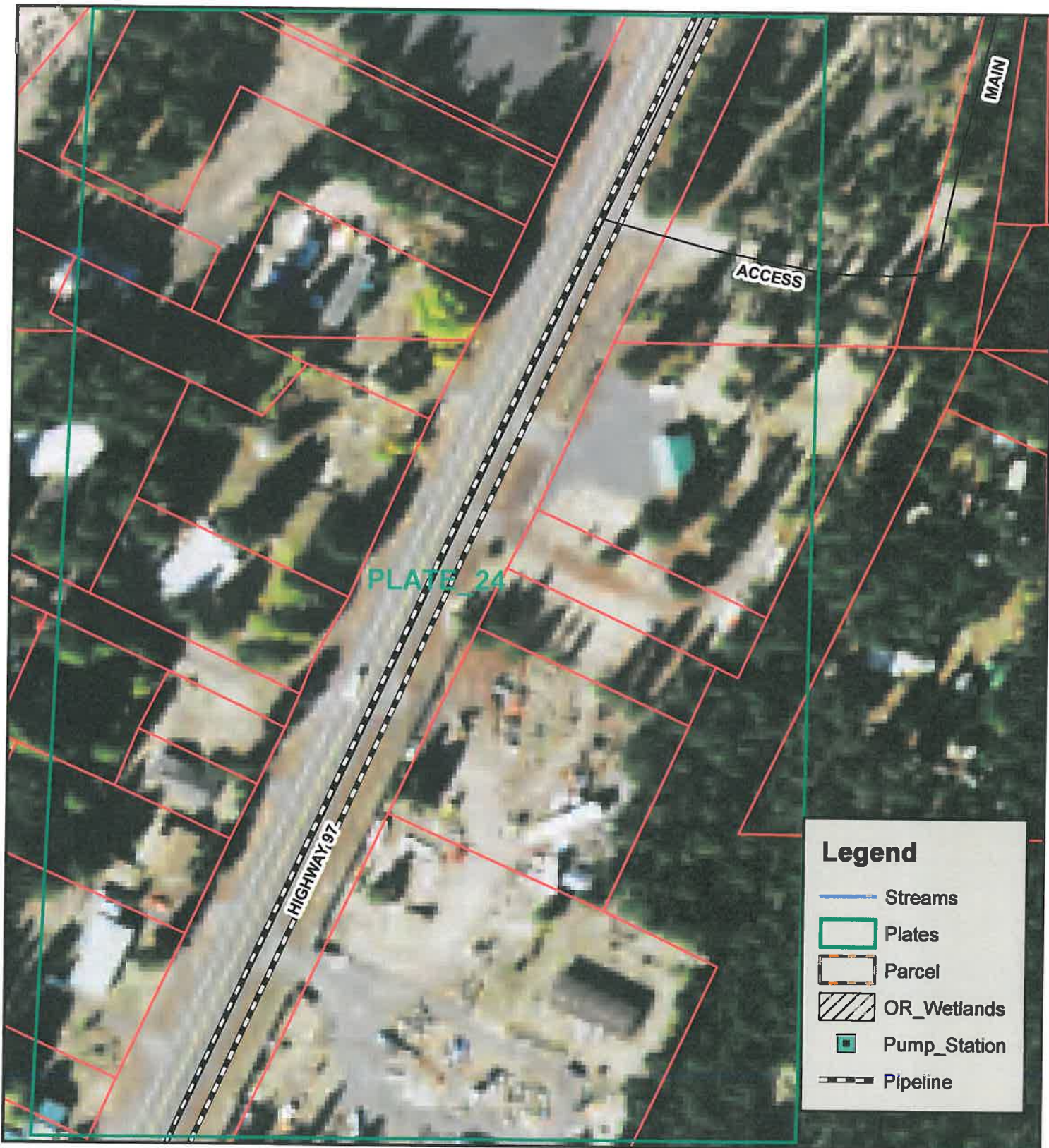
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



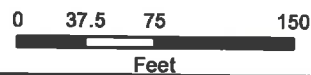
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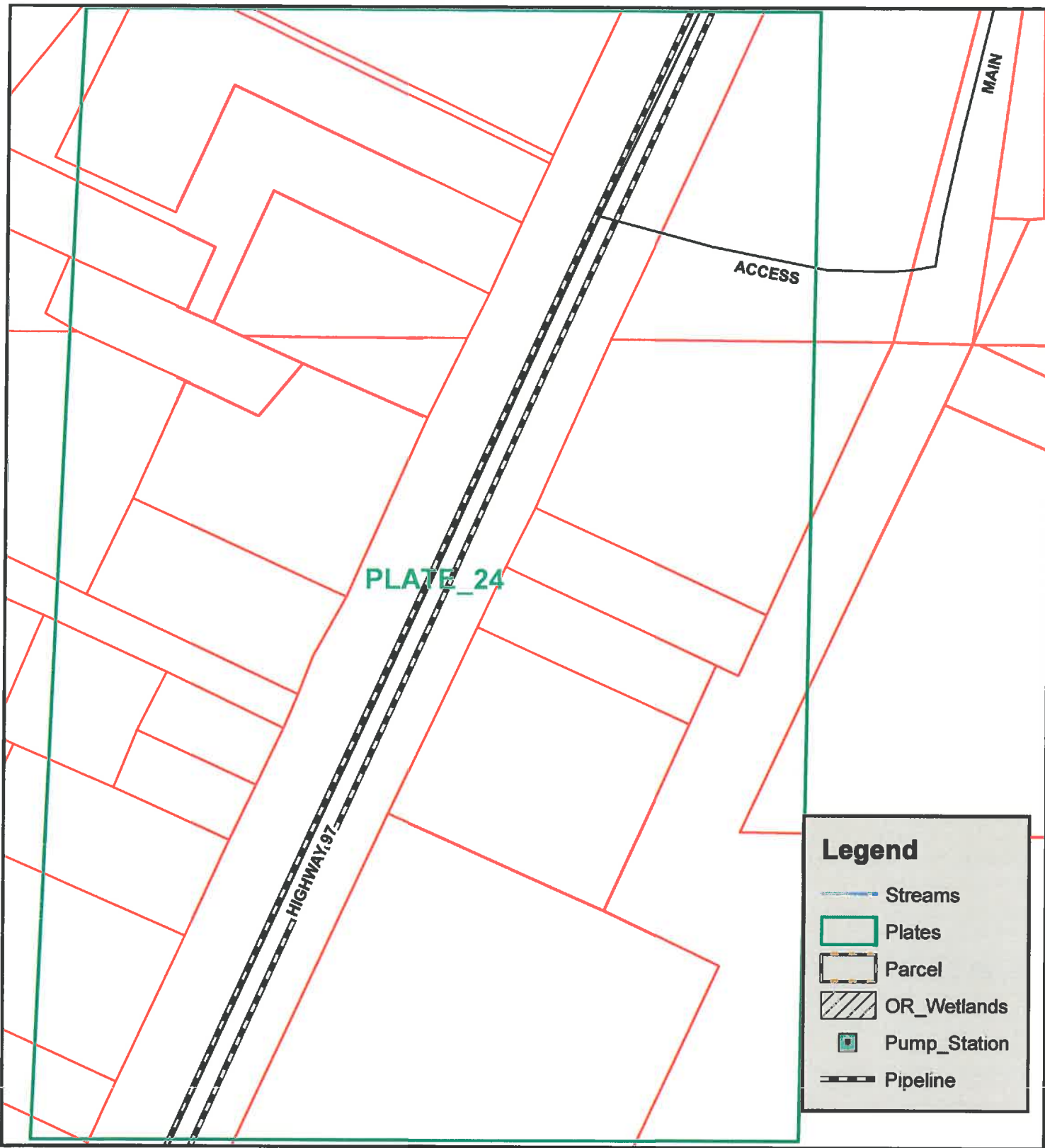
**Crescent Sanitary District
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Plate Map

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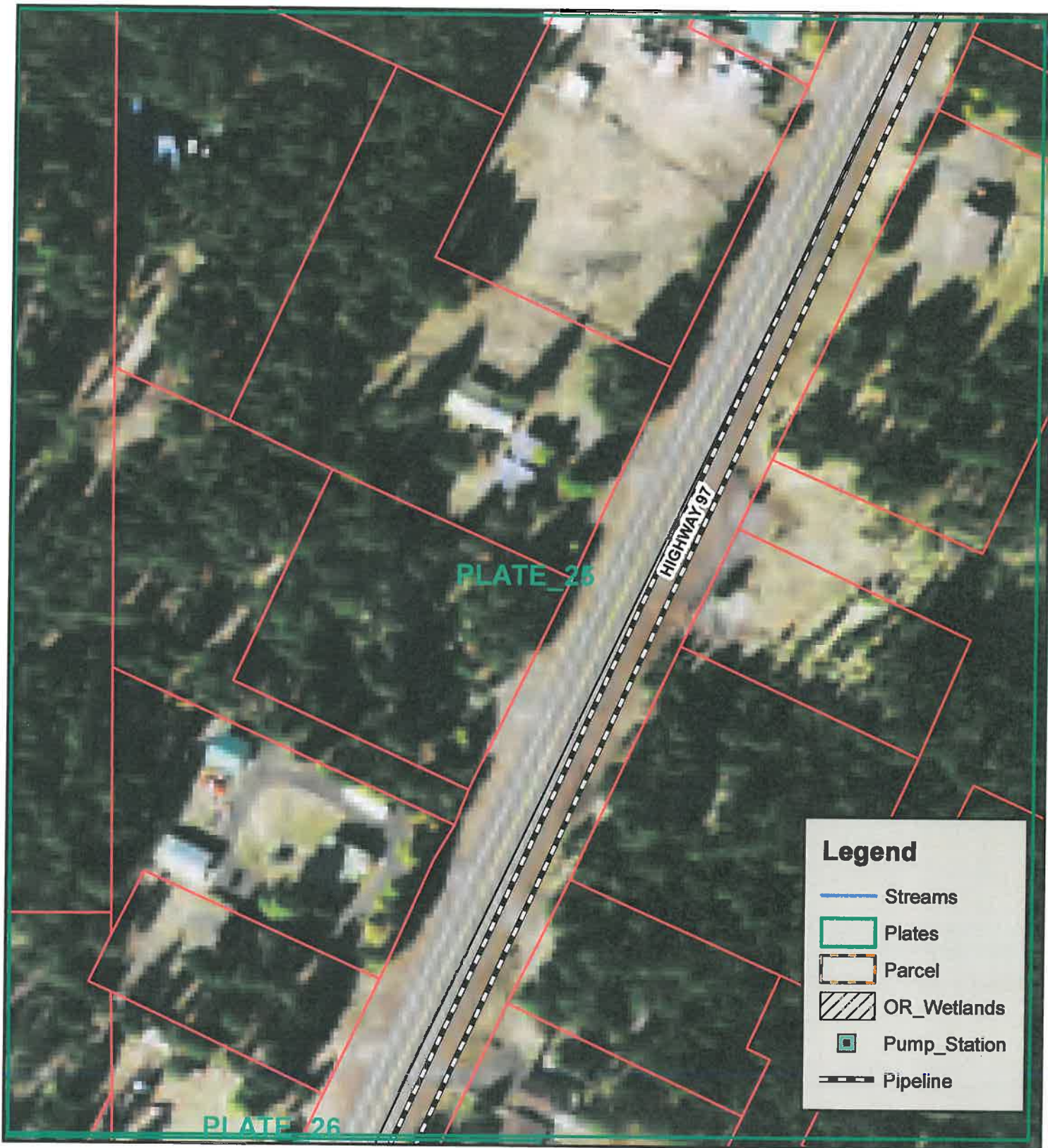
Crescent Sanitary District
Wastewater System Improvements

Plate Map

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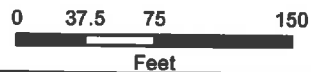
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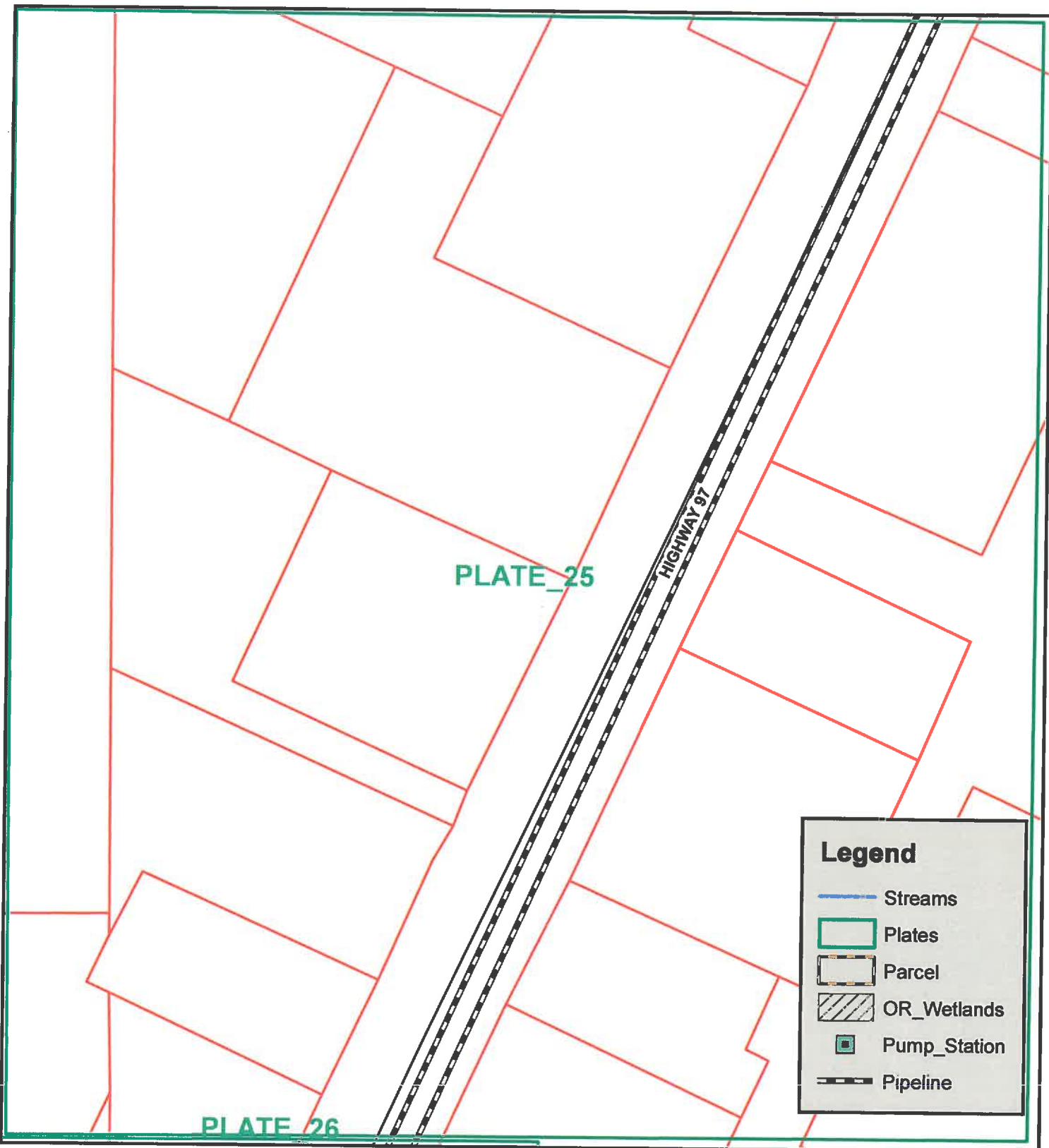
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

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Map Created On: December 14, 2015



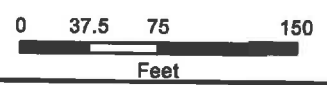
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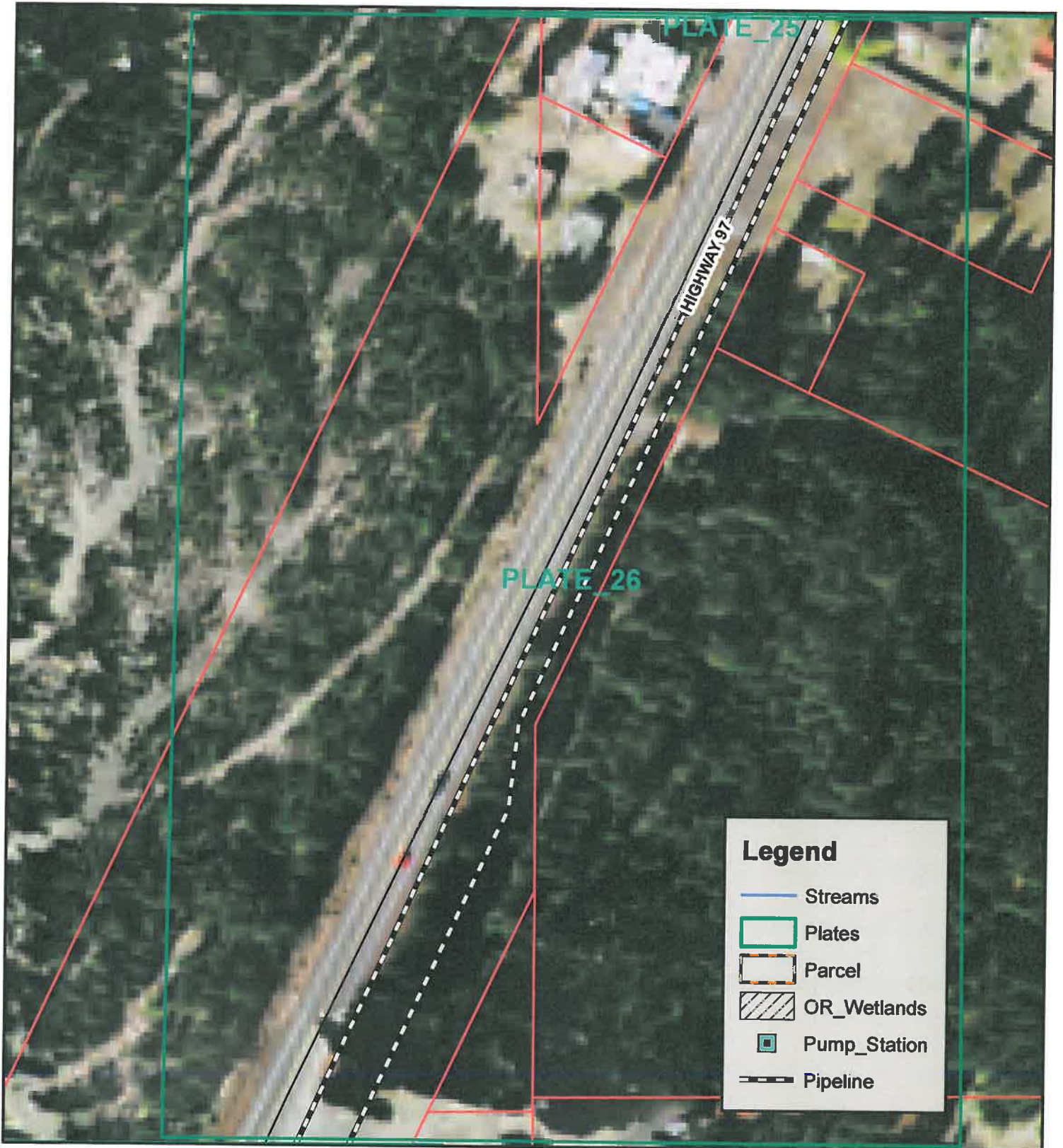
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

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Map Created On: December 14, 2015



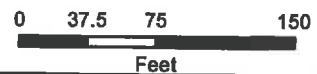
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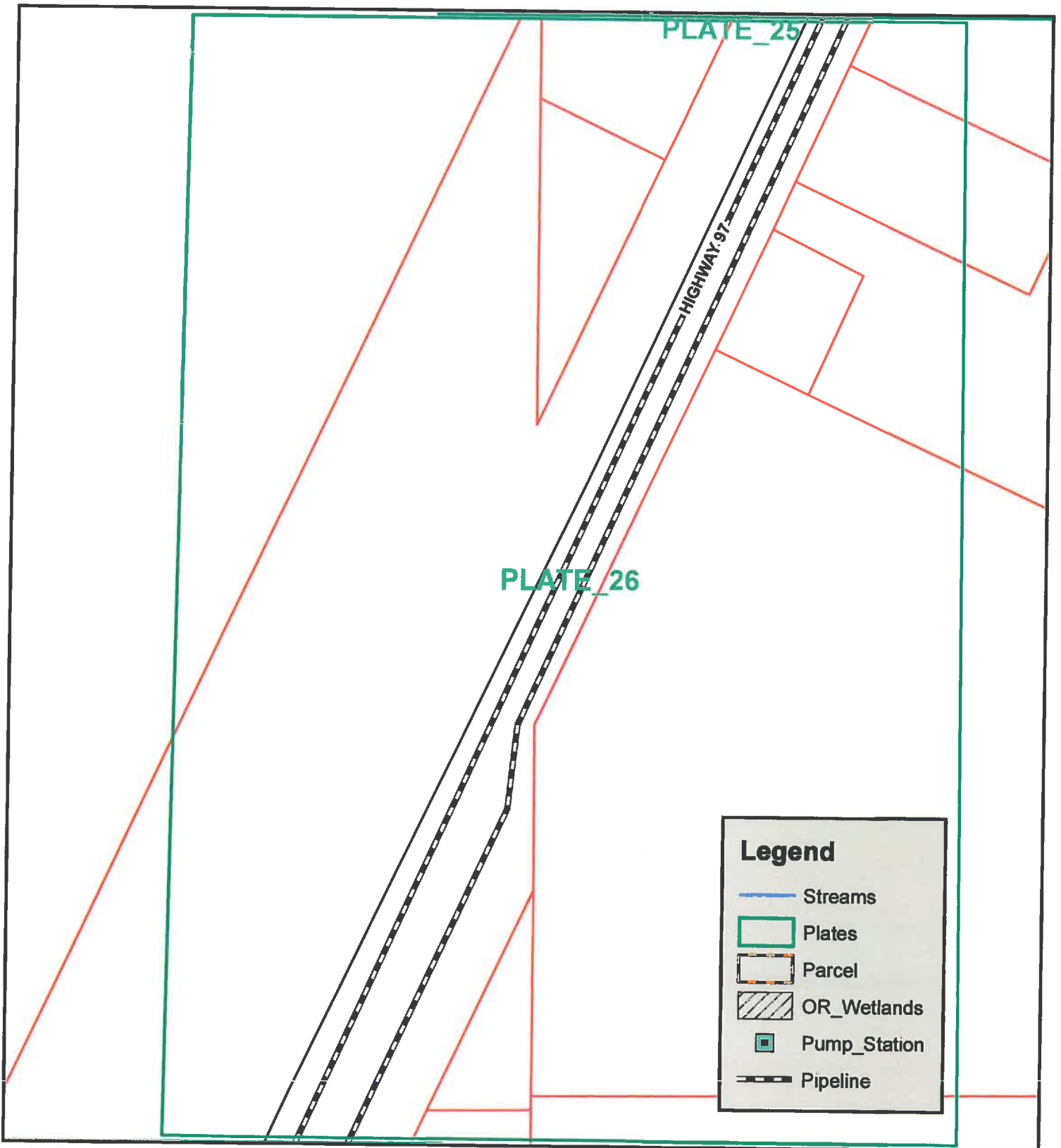
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

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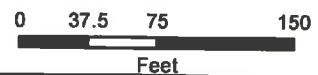


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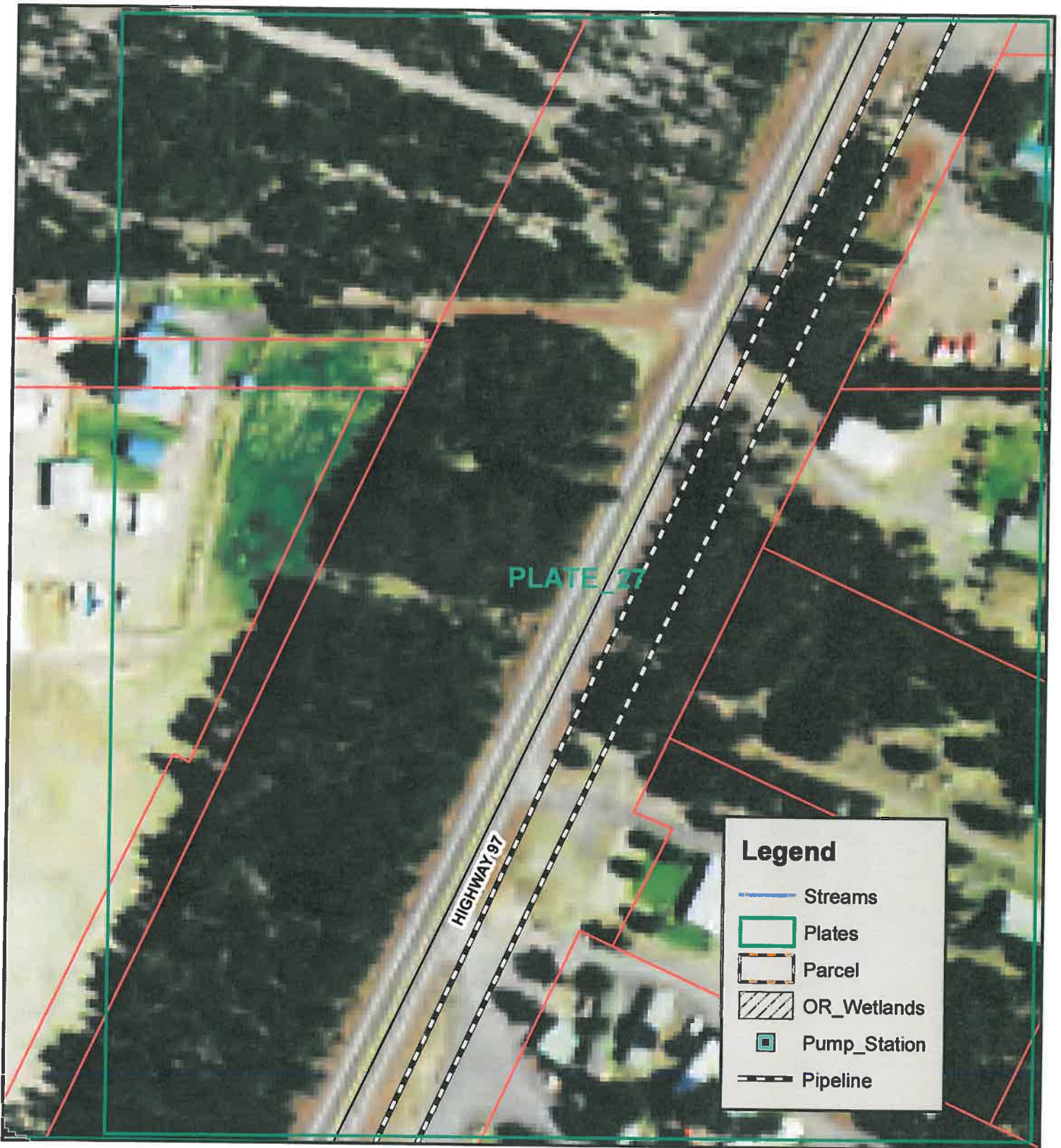
**Crescent Sanitary District
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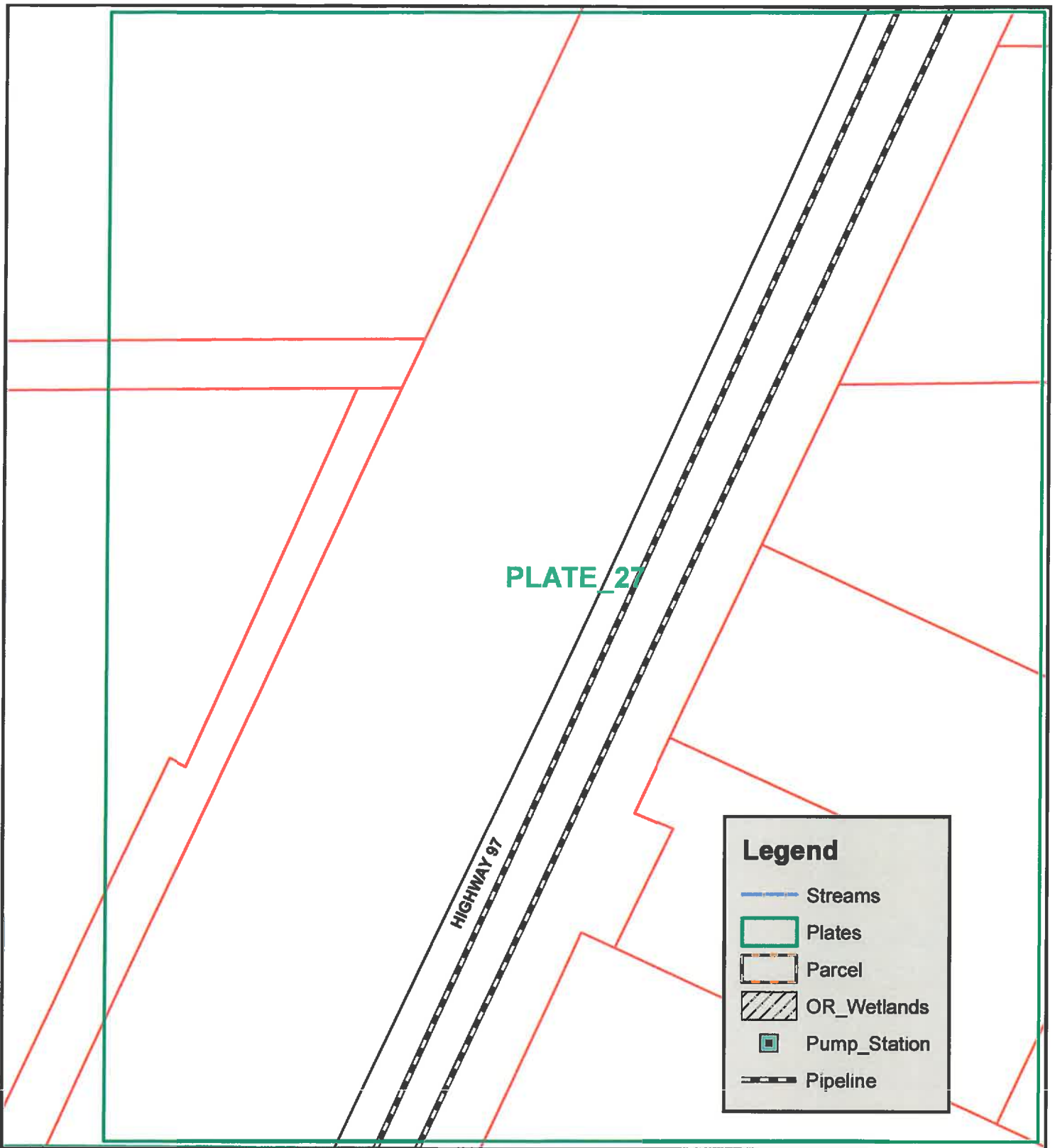
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

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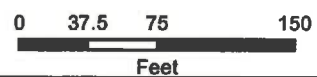
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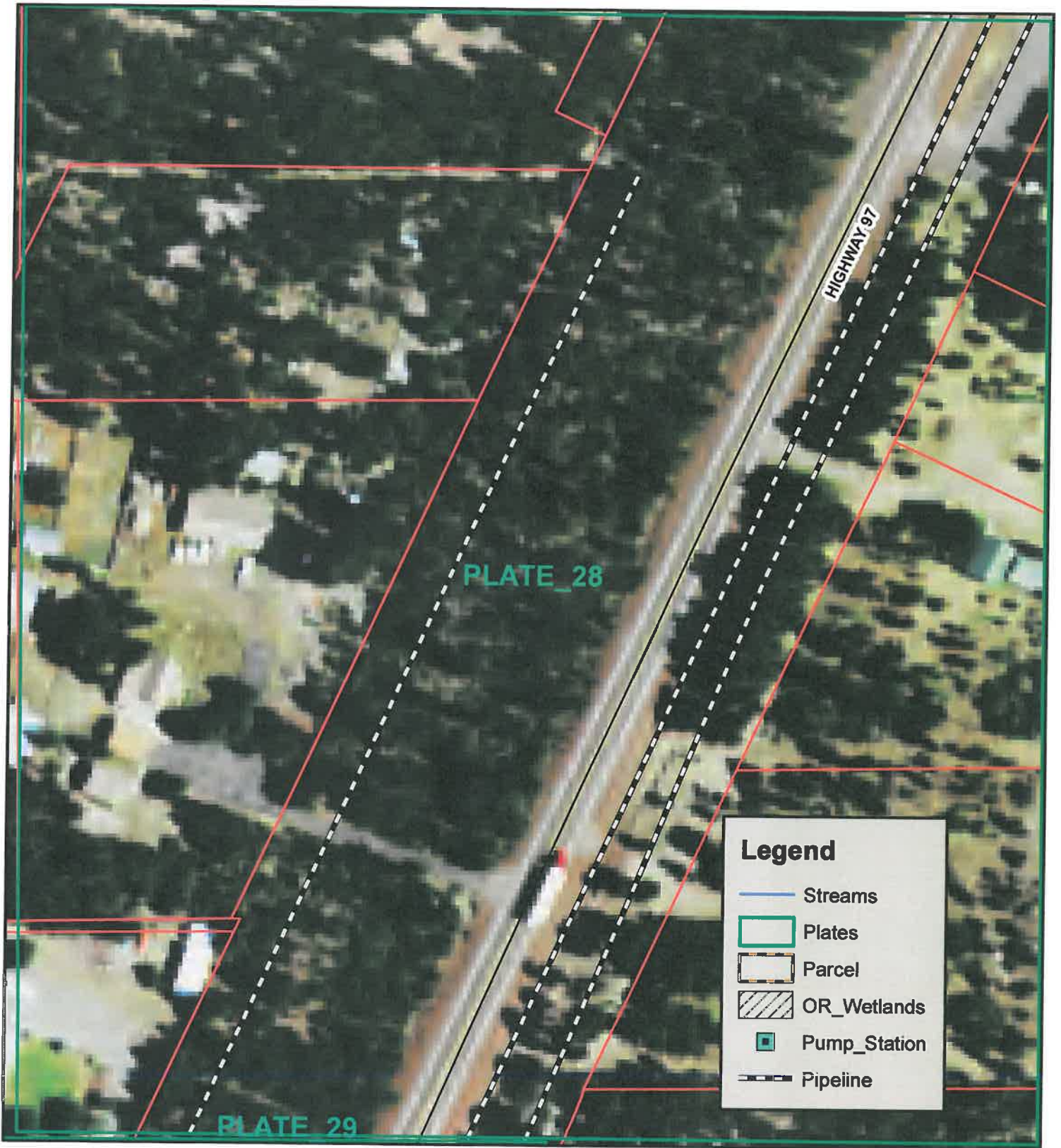
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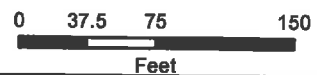
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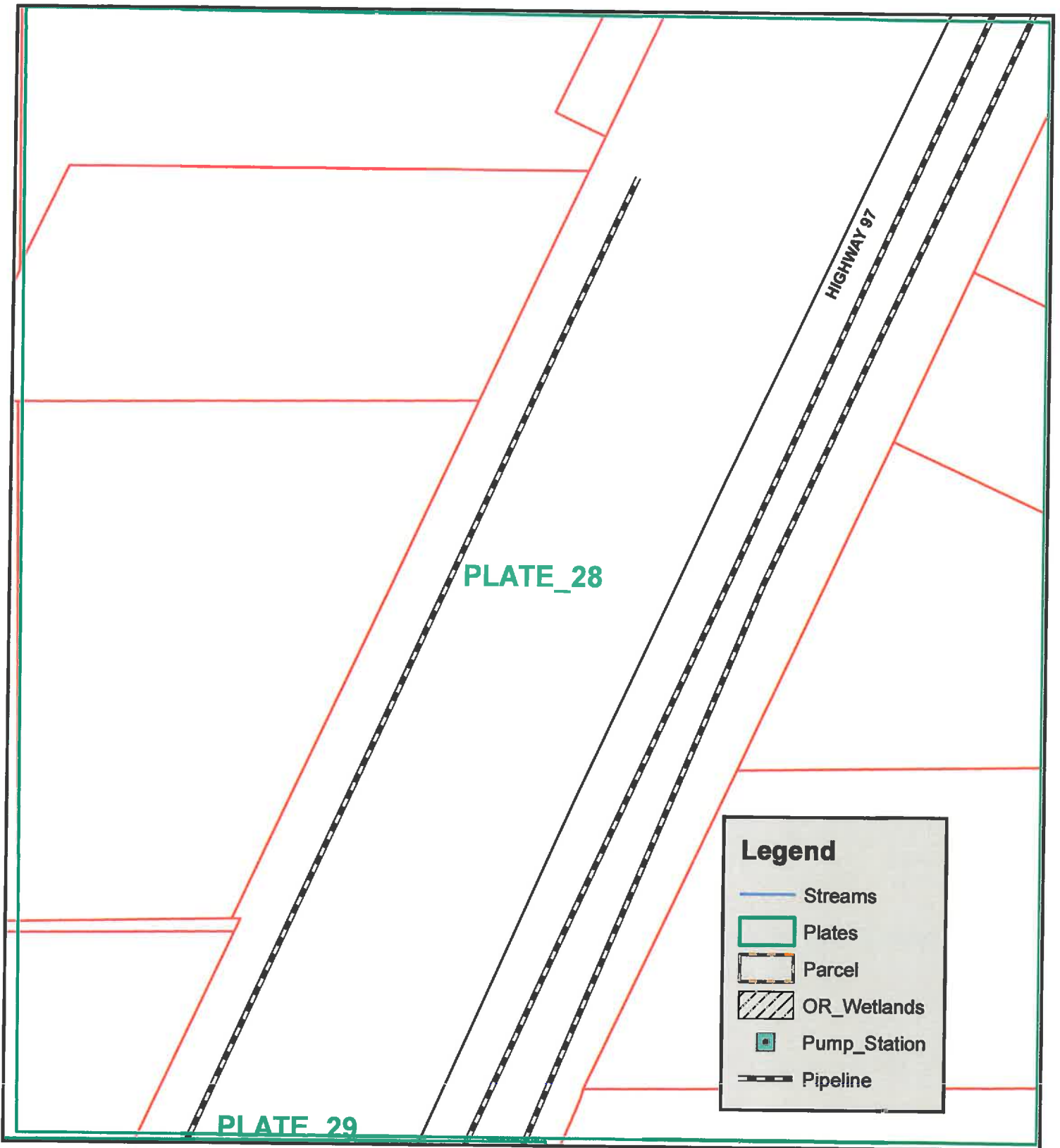
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map







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Legend

-  Streams
-  Plates
-  Parcel
-  OR_Wetlands
-  Pump_Station
-  Pipeline

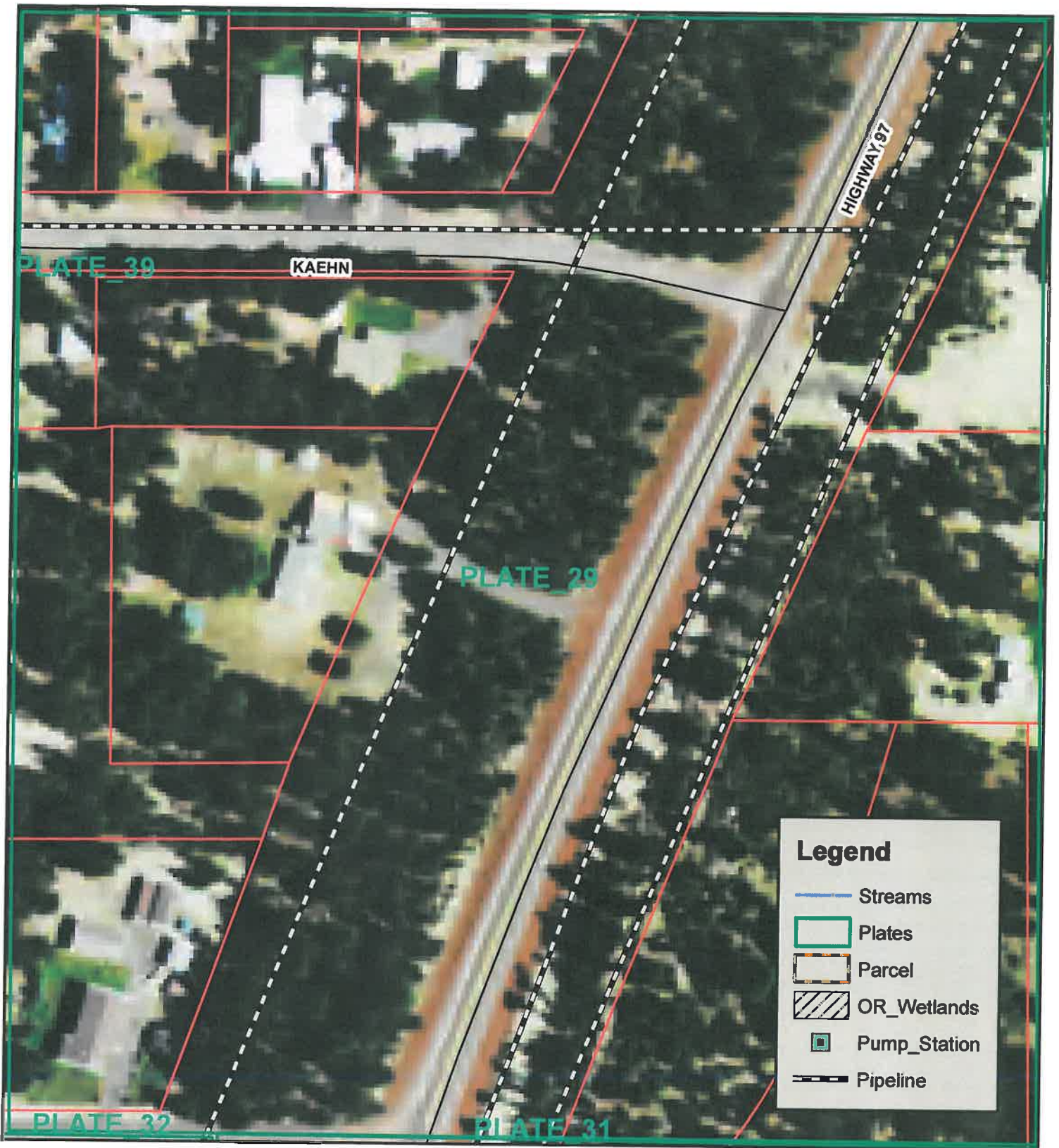
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map







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Legend

-  Streams
-  Plates
-  Parcel
-  OR_Wetlands
-  Pump_Station
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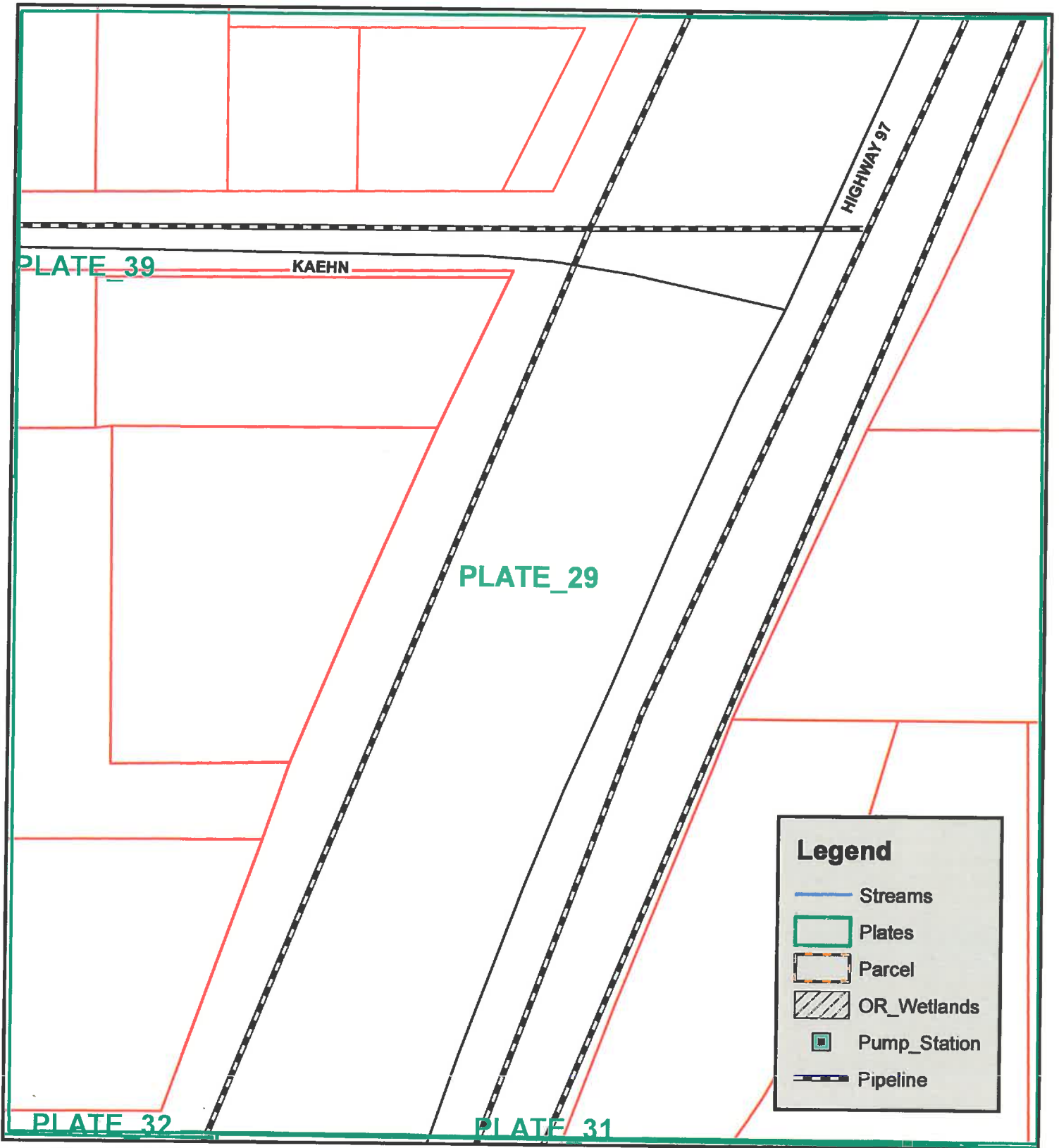
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map







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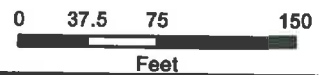
Legend

-  Streams
-  Plates
-  Parcel
-  OR_Wetlands
-  Pump_Station
-  Pipeline

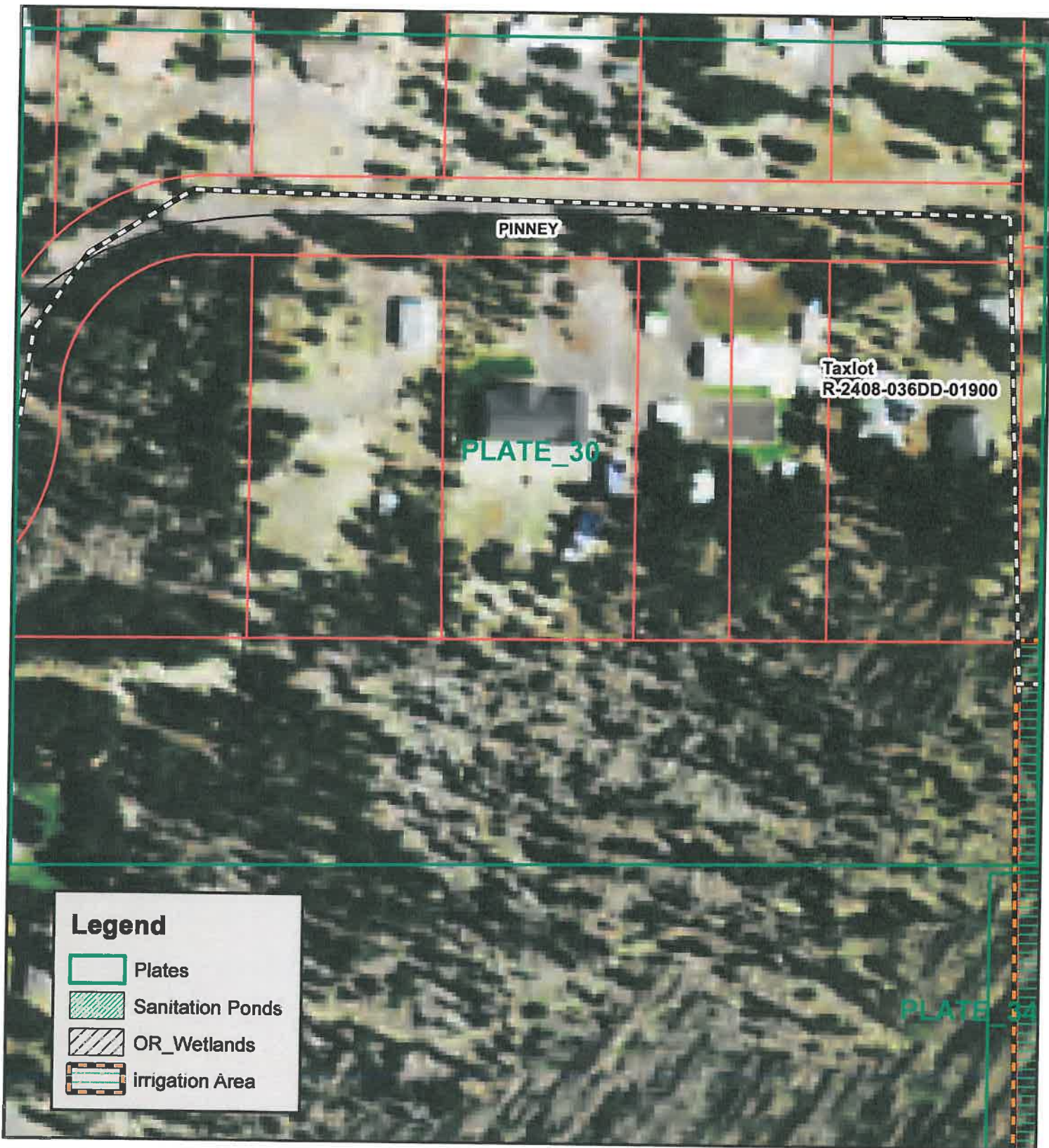
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

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Legend

-  Plates
-  Sanitation Ponds
-  OR_Wetlands
-  Irrigation Area

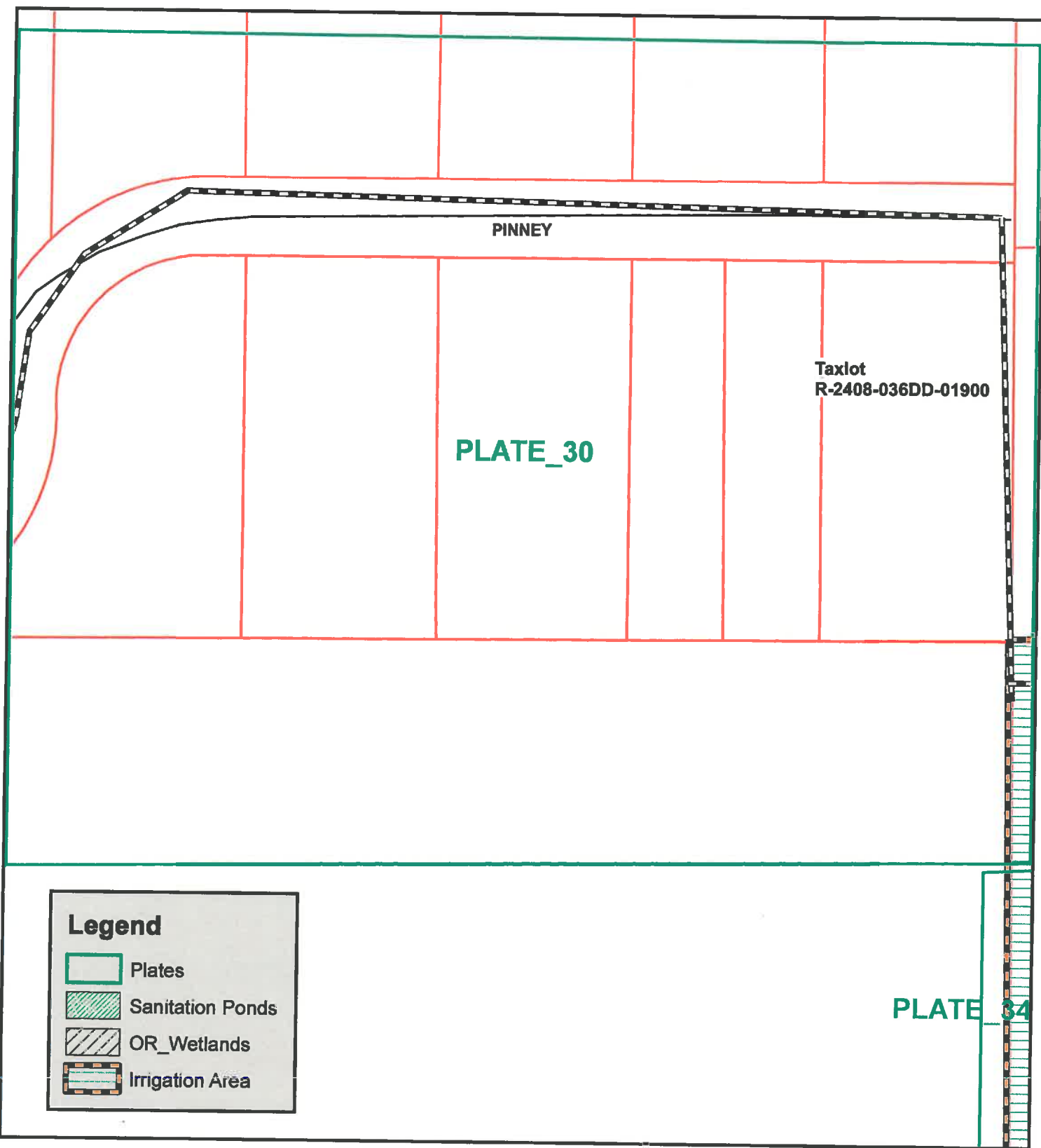
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

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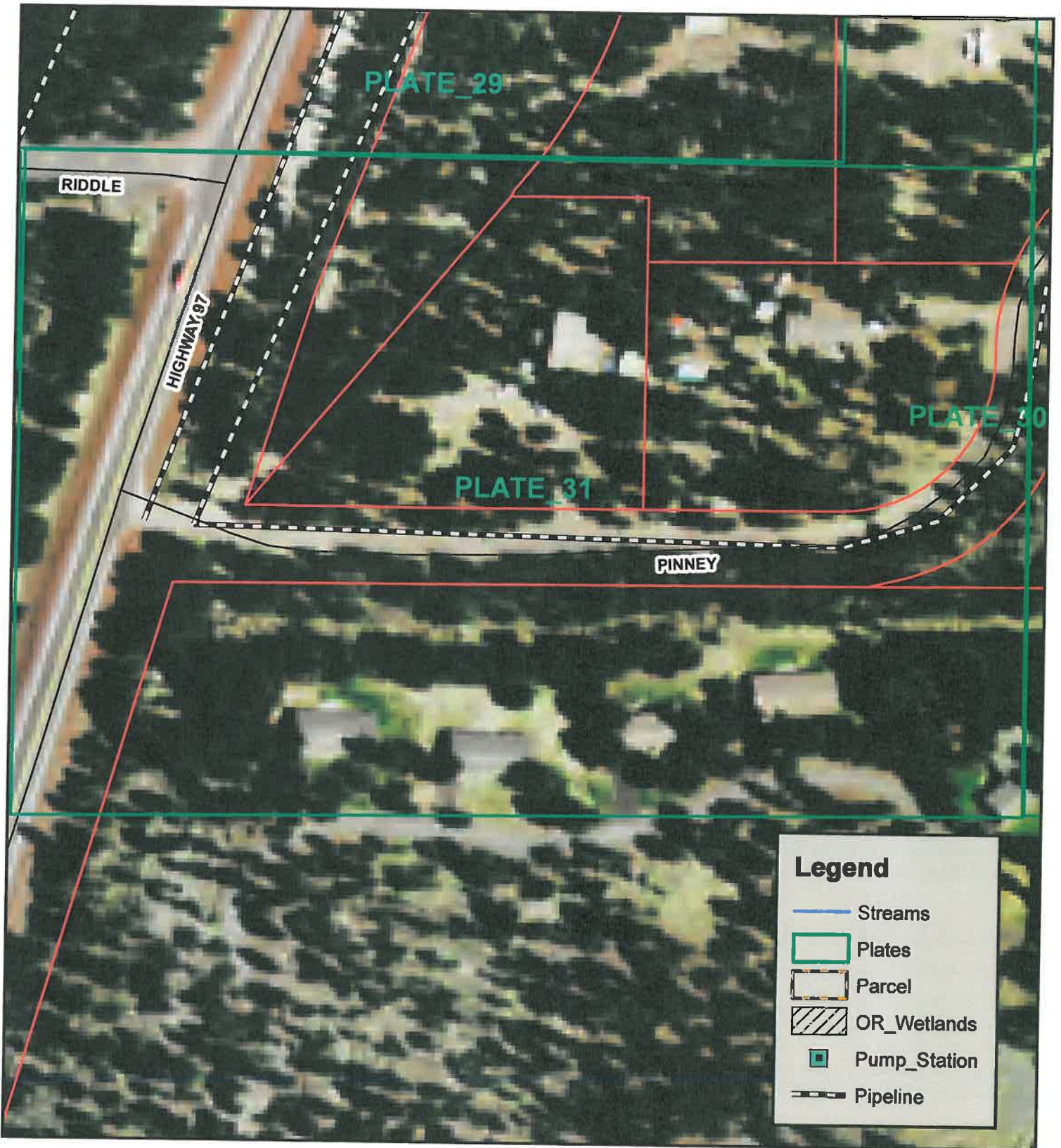
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map







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Legend

-  Streams
-  Plates
-  Parcel
-  OR_Wetlands
-  Pump_Station
-  Pipeline

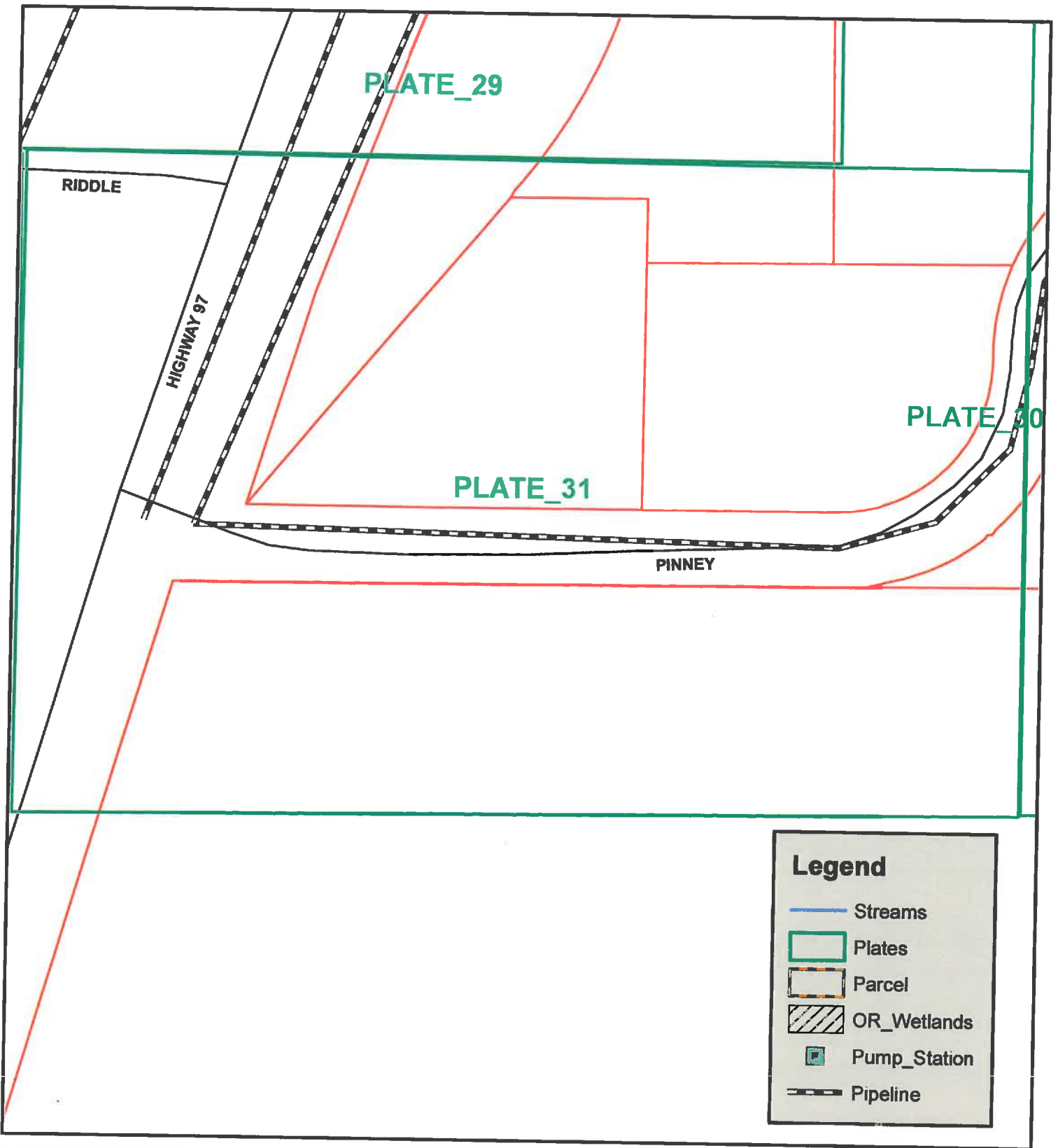
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map







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Legend

-  Streams
-  Plates
-  Parcel
-  OR_Wetlands
-  Pump_Station
-  Pipeline

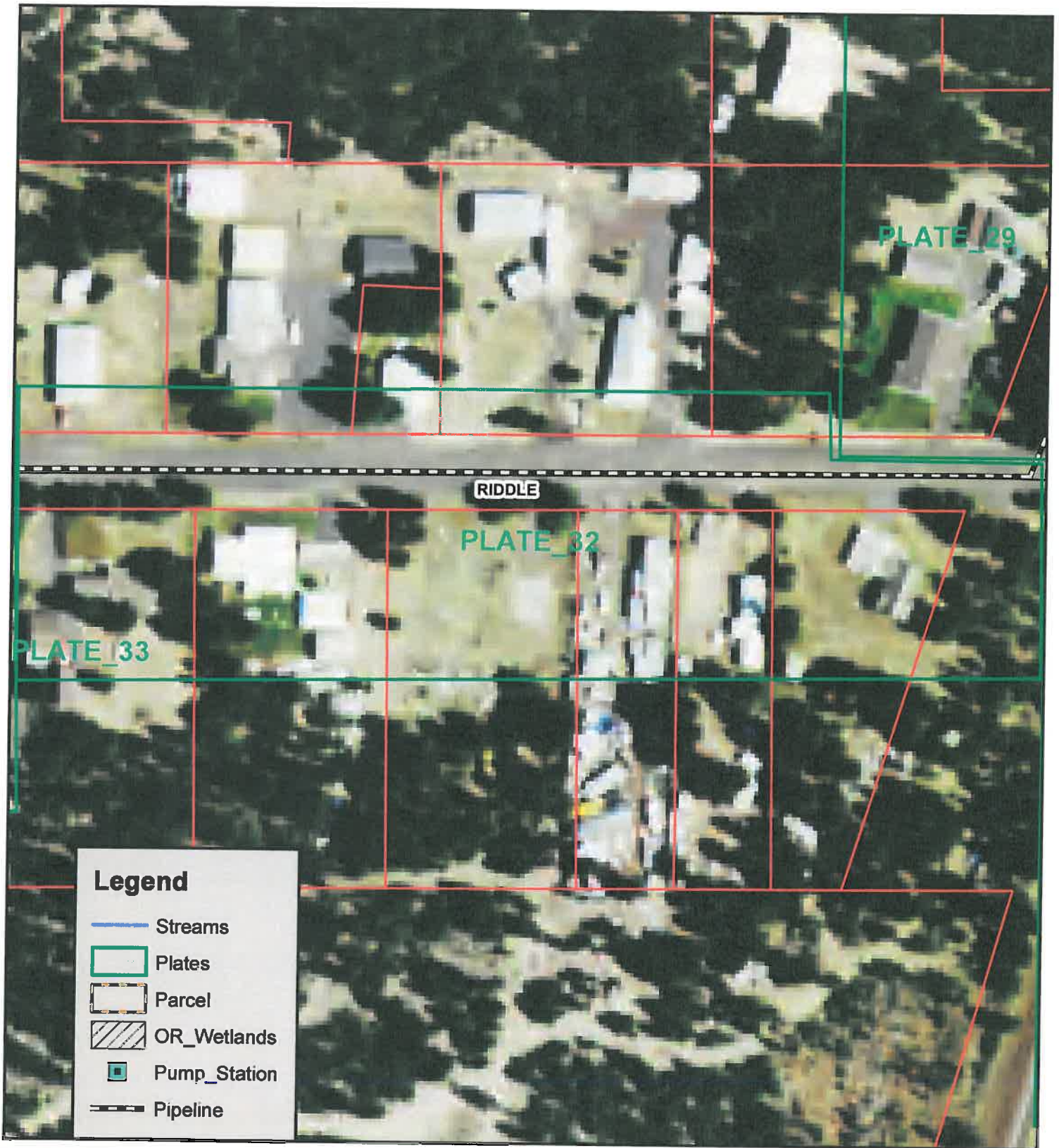
**Crescent Sanitary District
Wastewater System Improvements**

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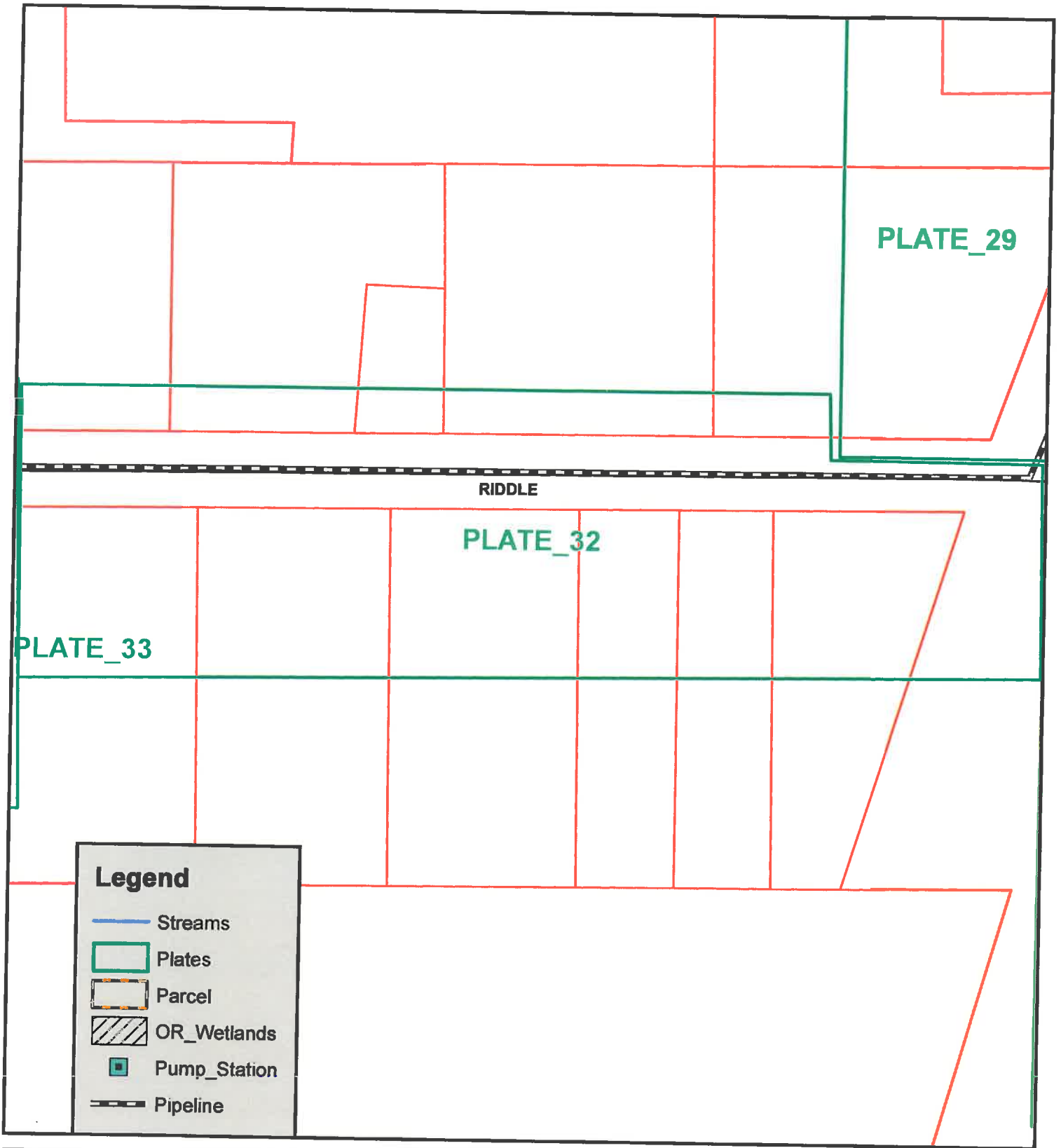
**Crescent Sanitary District
Wastewater System Improvements**

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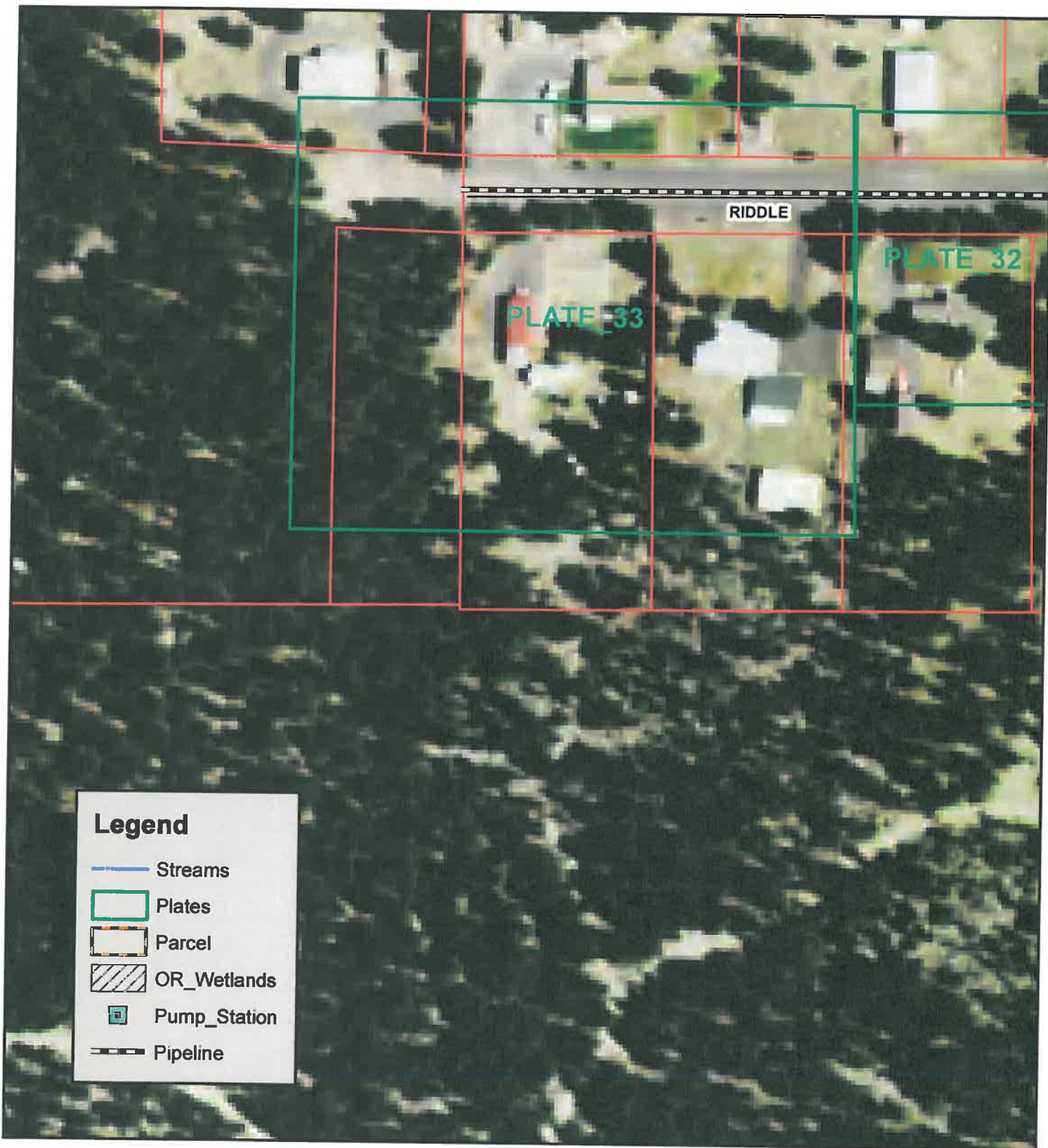
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map







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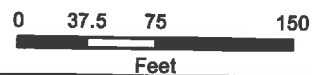
Legend

-  Streams
-  Plates
-  Parcel
-  OR_Wetlands
-  Pump_Station
-  Pipeline

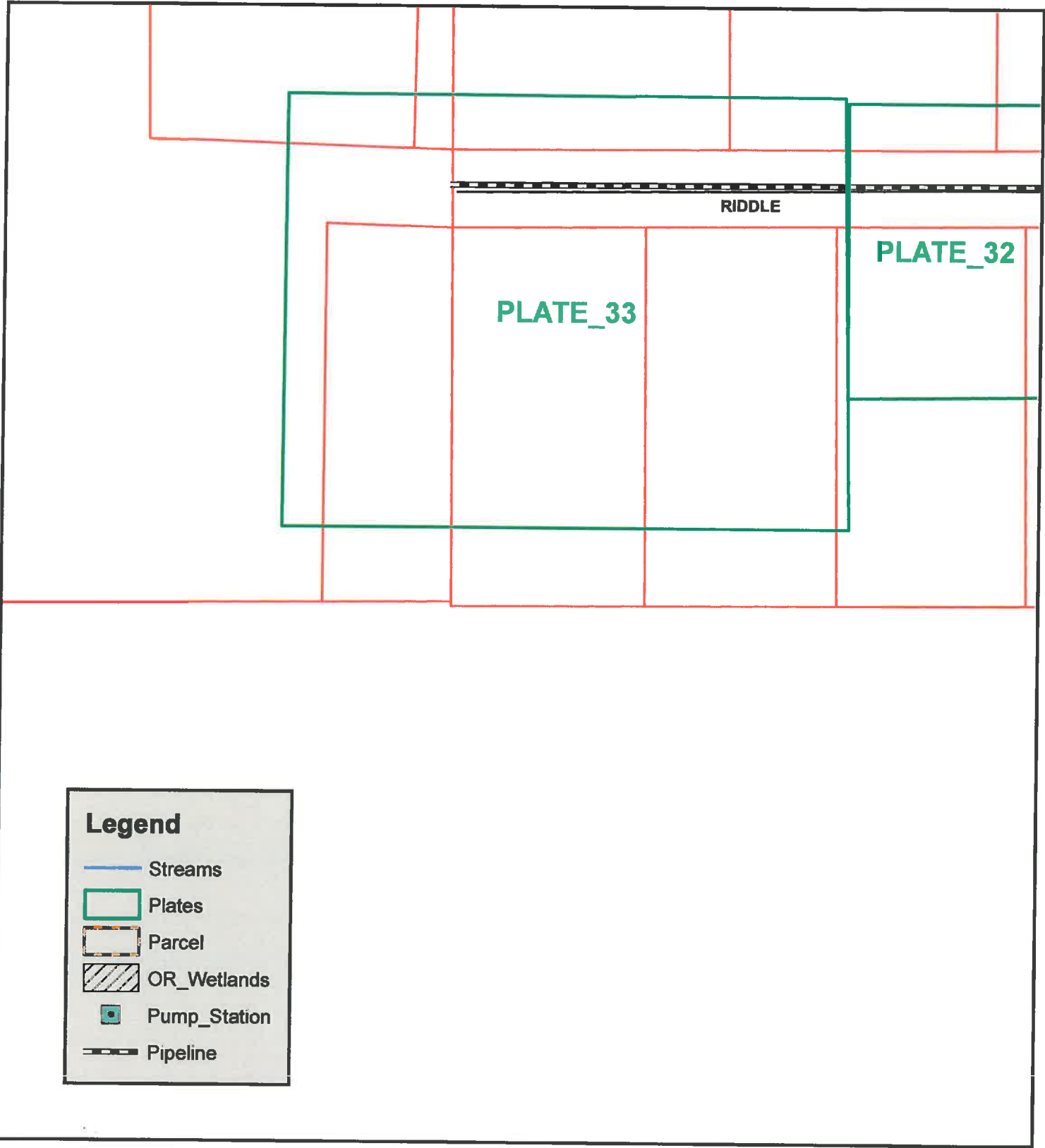
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

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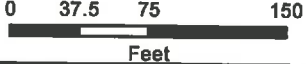
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

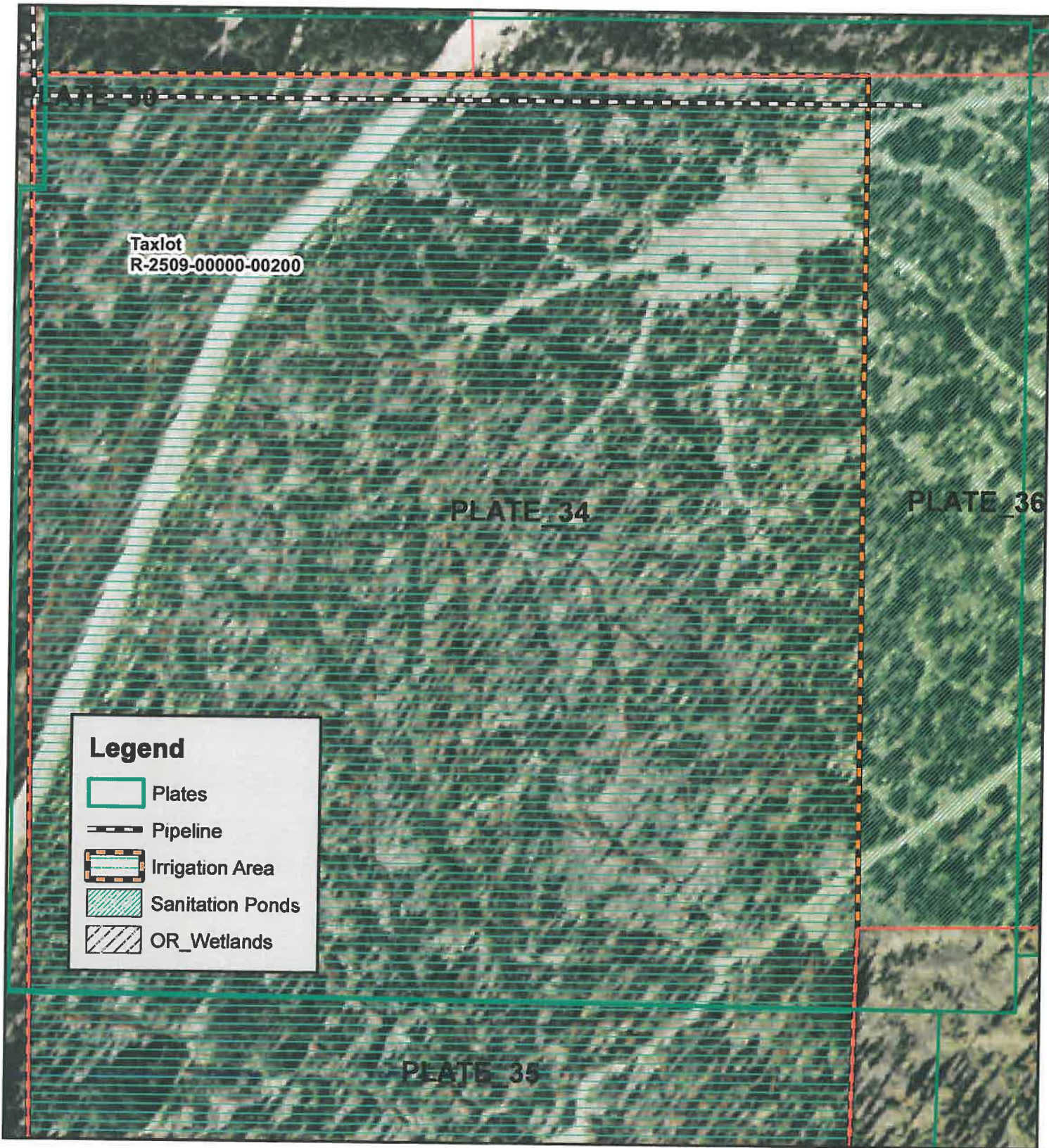
Map Created By: Ruth Olsen
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
Rabe Consulting



Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2014. Reproduced by Rabe Consulting for the purpose of this document.



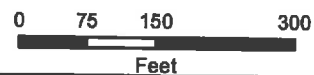
Legend

-  Plates
-  Pipeline
-  Irrigation Area
-  Sanitation Ponds
-  OR_Wetlands

**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

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
PLATE_30

Taxlot
R-2509-00000-00200

PLATE_34

PLATE_36

Legend

-  Plates
-  Pipeline
-  Irrigation Area
-  Sanitation Ponds
-  OR_Wetlands

PLATE_35

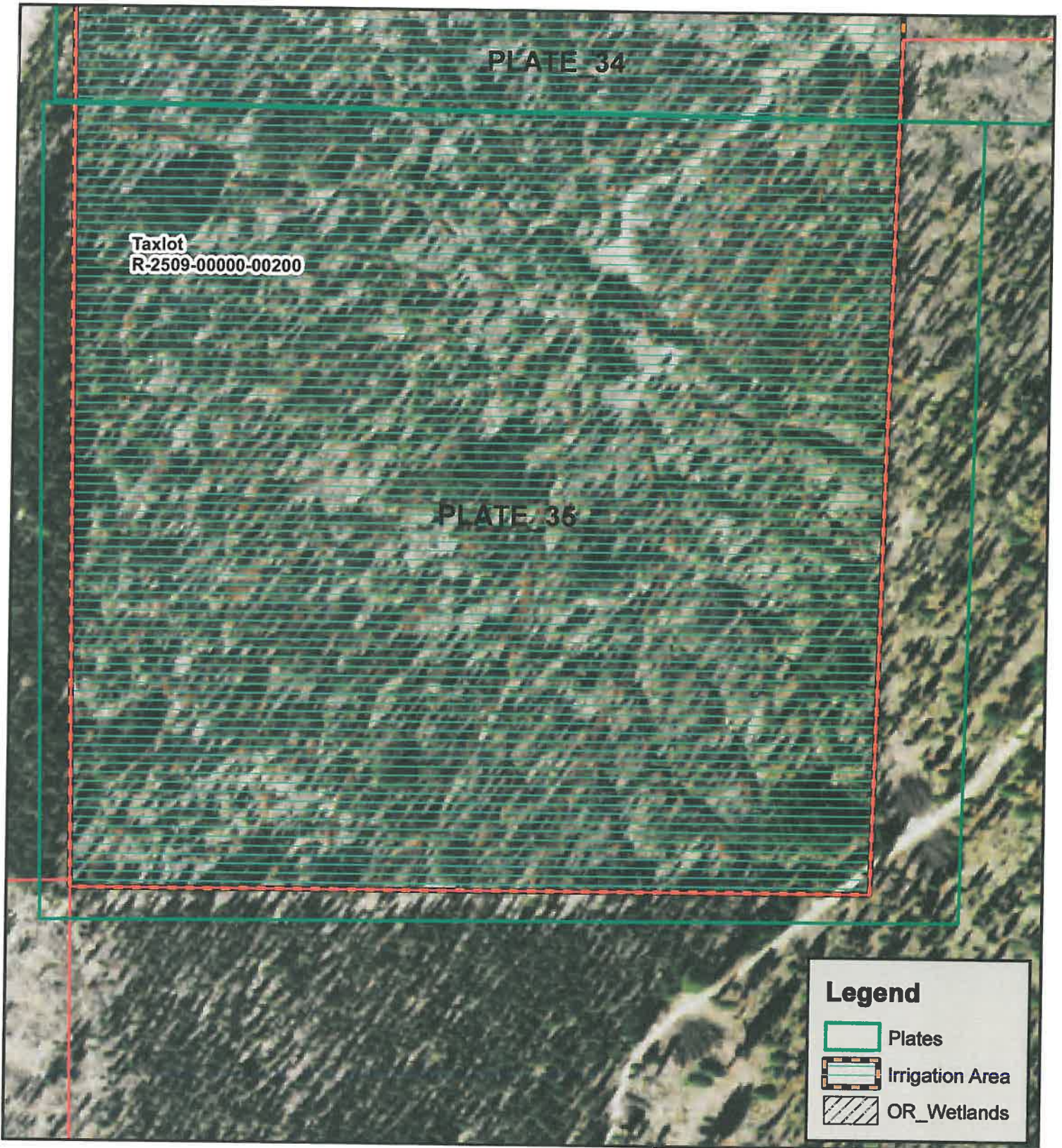
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

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Crescent Sanitary District
Wastewater System Improvements

Plate Map



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PLATE_34

**Taxlot
R-2509-00000-00200**

PLATE_35

Legend

-  Plates
-  Irrigation Area
-  OR_Wetlands

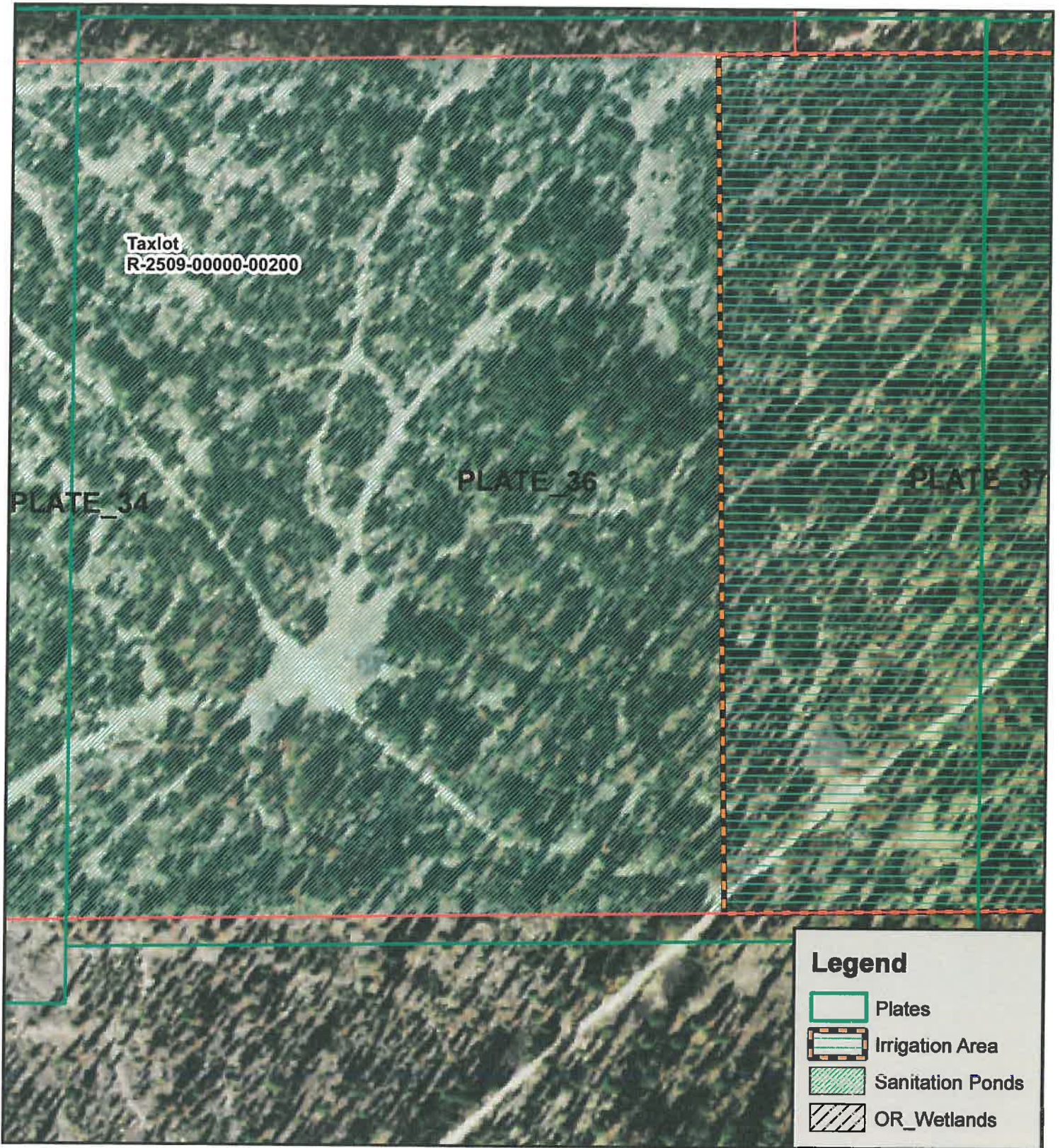
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map





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Legend

-  Plates
-  Irrigation Area
-  Sanitation Ponds
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Crescent Sanitary District
Wastewater System Improvements

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Taxlot
R-2509-00000-00200

PLATE_34

PLATE_36

PLATE_37

Legend

-  Plates
-  Irrigation Area
-  Sanitation Ponds
-  OR_Wetlands

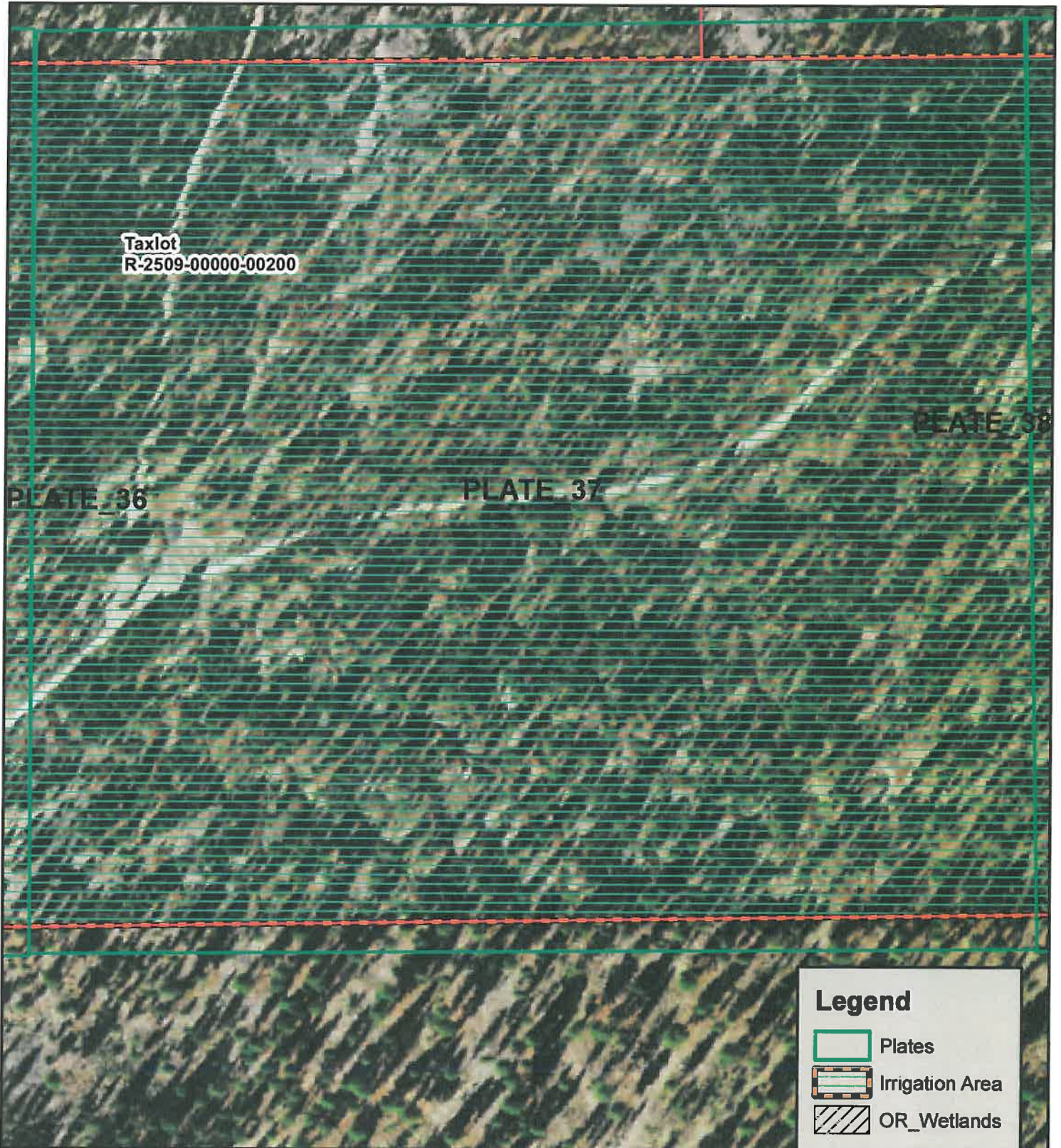
Crescent Sanitary District
Wastewater System Improvements

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**Crescent Sanitary District
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Taxlot
R-2509-00000-00200

PLATE_38

PLATE_36

PLATE_37

Legend

-  Plates
-  Irrigation Area
-  OR_Wetlands

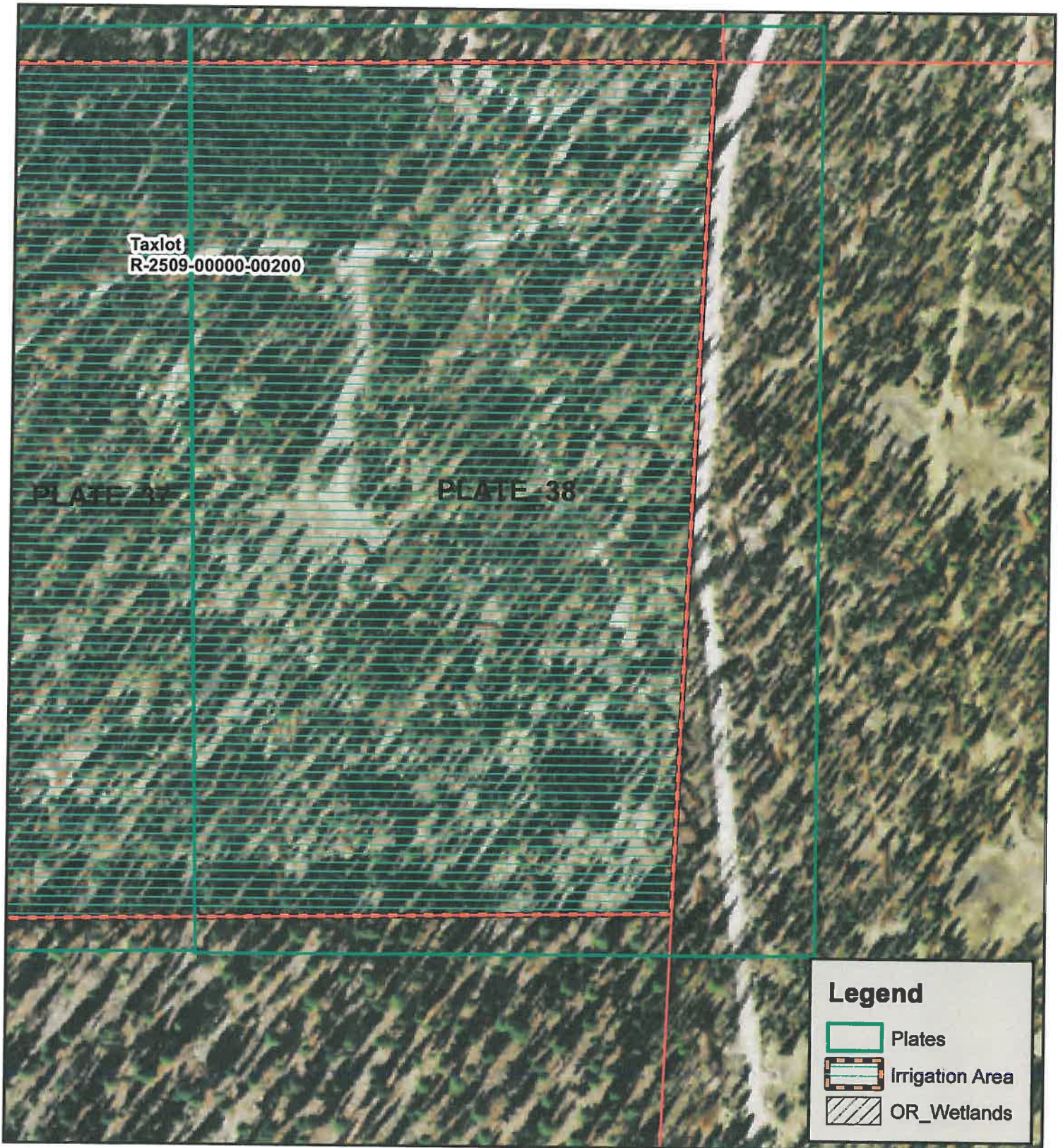
Crescent Sanitary District
Wastewater System Improvements

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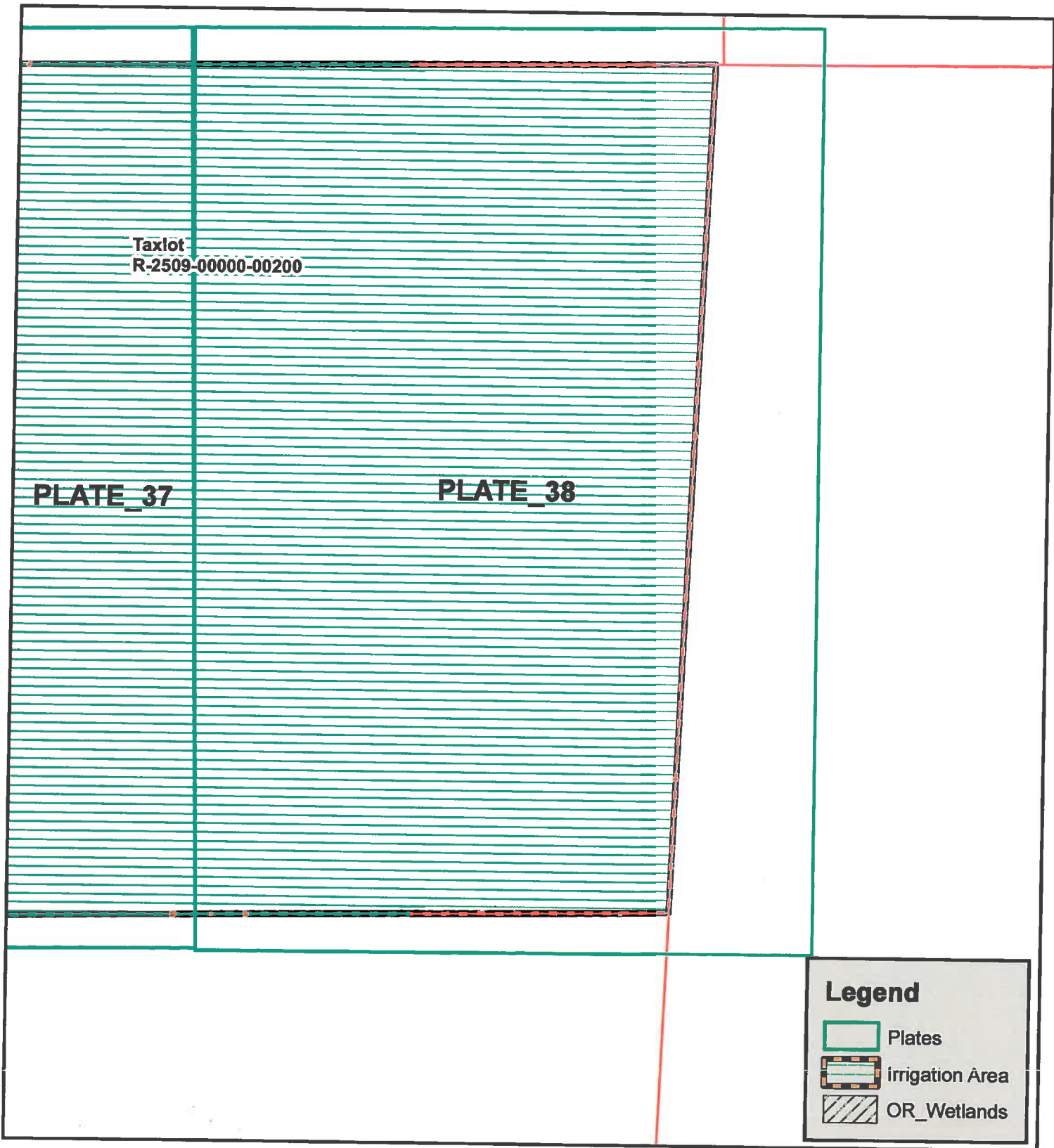
Crescent Sanitary District
Wastewater System Improvements

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**Crescent Sanitary District
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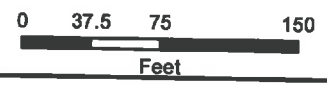
Legend

-  Plates
-  Pipeline
-  OR_Wetlands

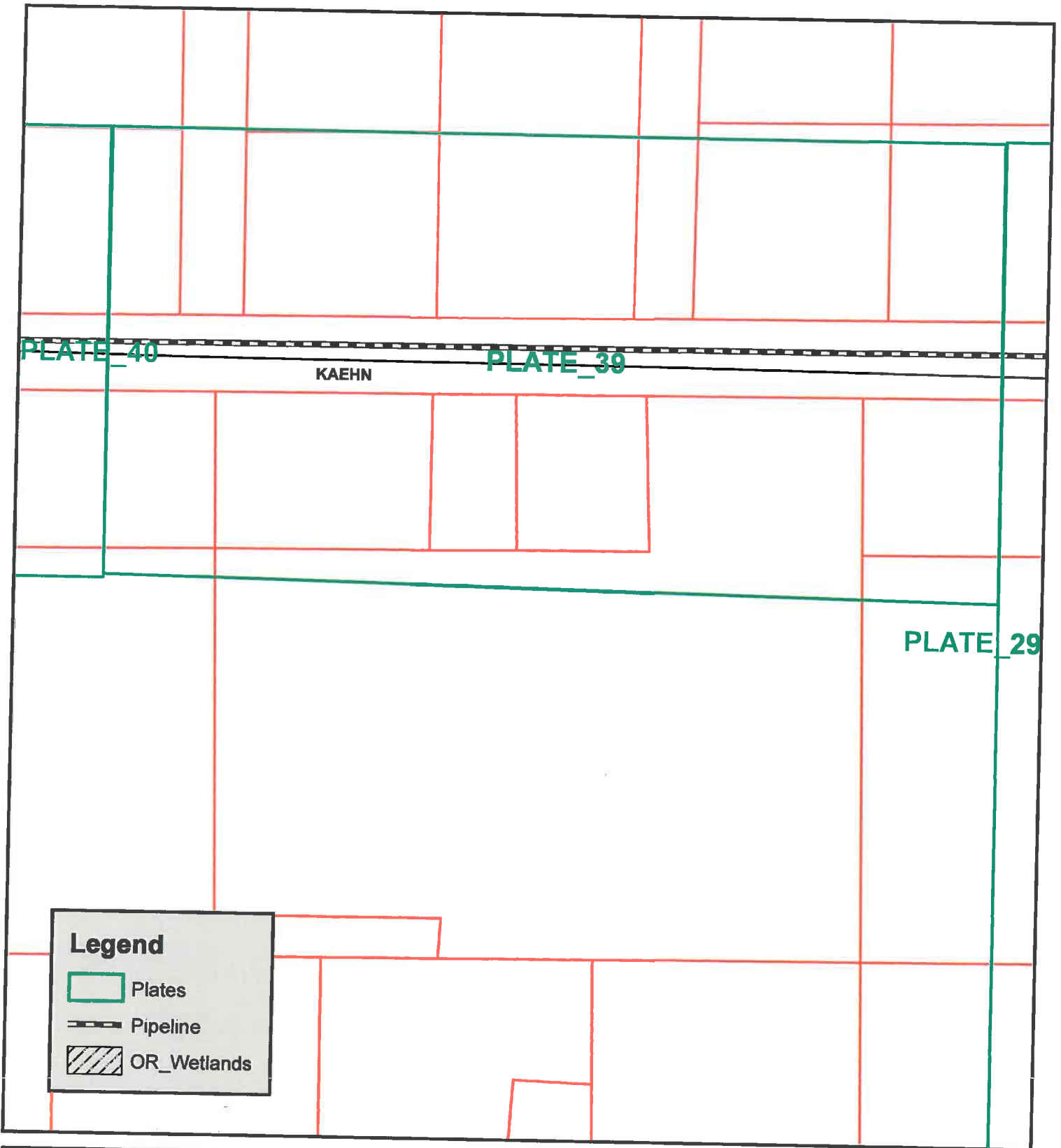
Crescent Sanitary District
Wastewater System Improvements

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**Crescent Sanitary District
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Map Created By: Ruth Olsen
Map Created On: December 14, 2015






Rabe Consulting



Data Source: National
Agriculture Imagery
Program (NAIP). Flown
in Summer 2014.
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purpose of this document.



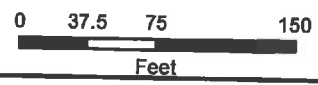
Legend

-  Plates
-  Pipeline
-  OR_Wetlands

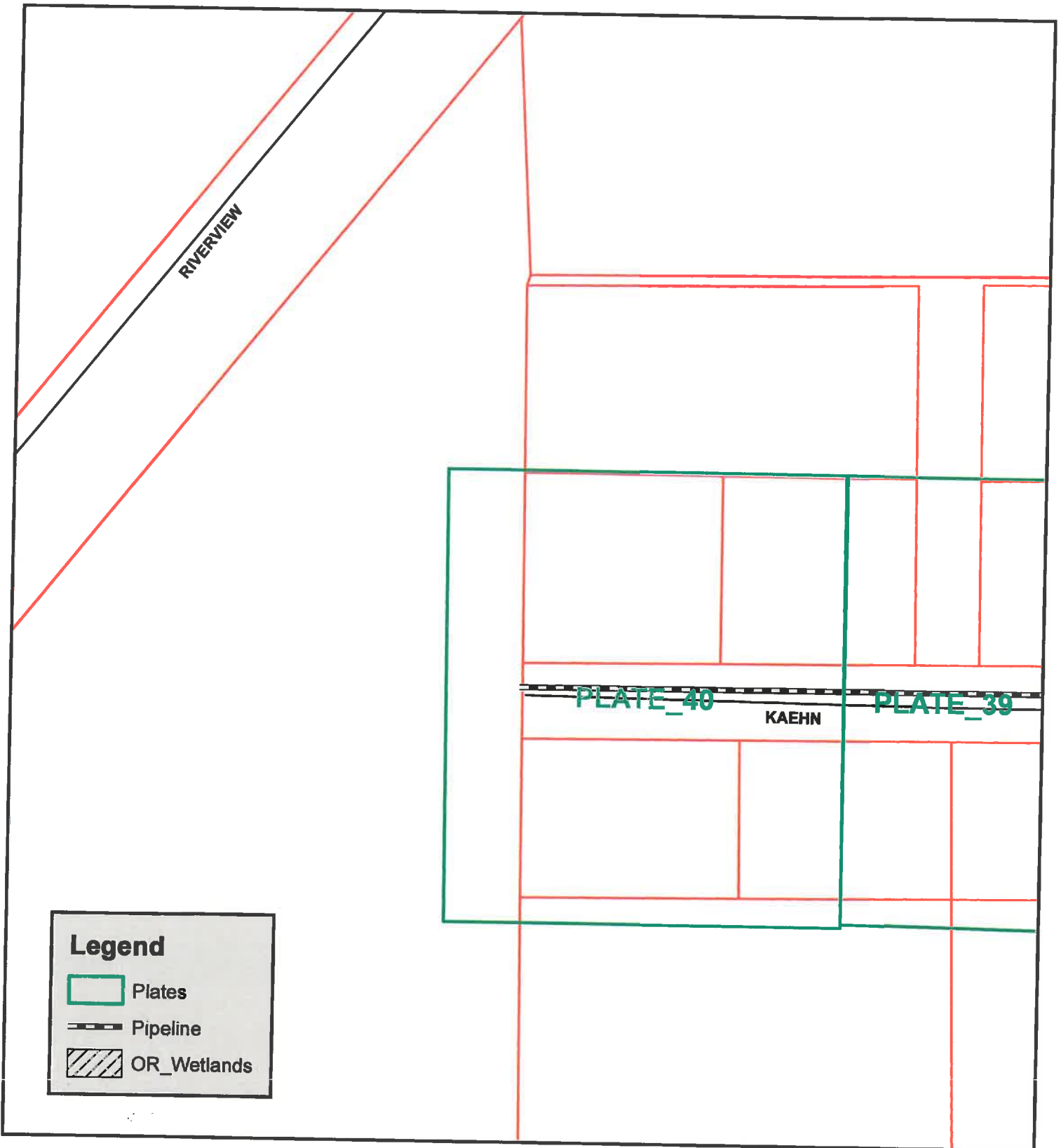
Crescent Sanitary District
Wastewater System Improvements

Plate Map

Map Created By: Ruth Olsen
 Map Created On: December 14, 2015



Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2014. Reproduced by Rabe Consulting for the purpose of this document.



**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



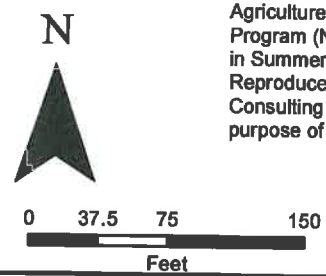
Data Source: National
Agriculture Imagery
Program (NAIP). Flown
in Summer 2014.
Reproduced by Rabe
Consulting for the
purpose of this document.



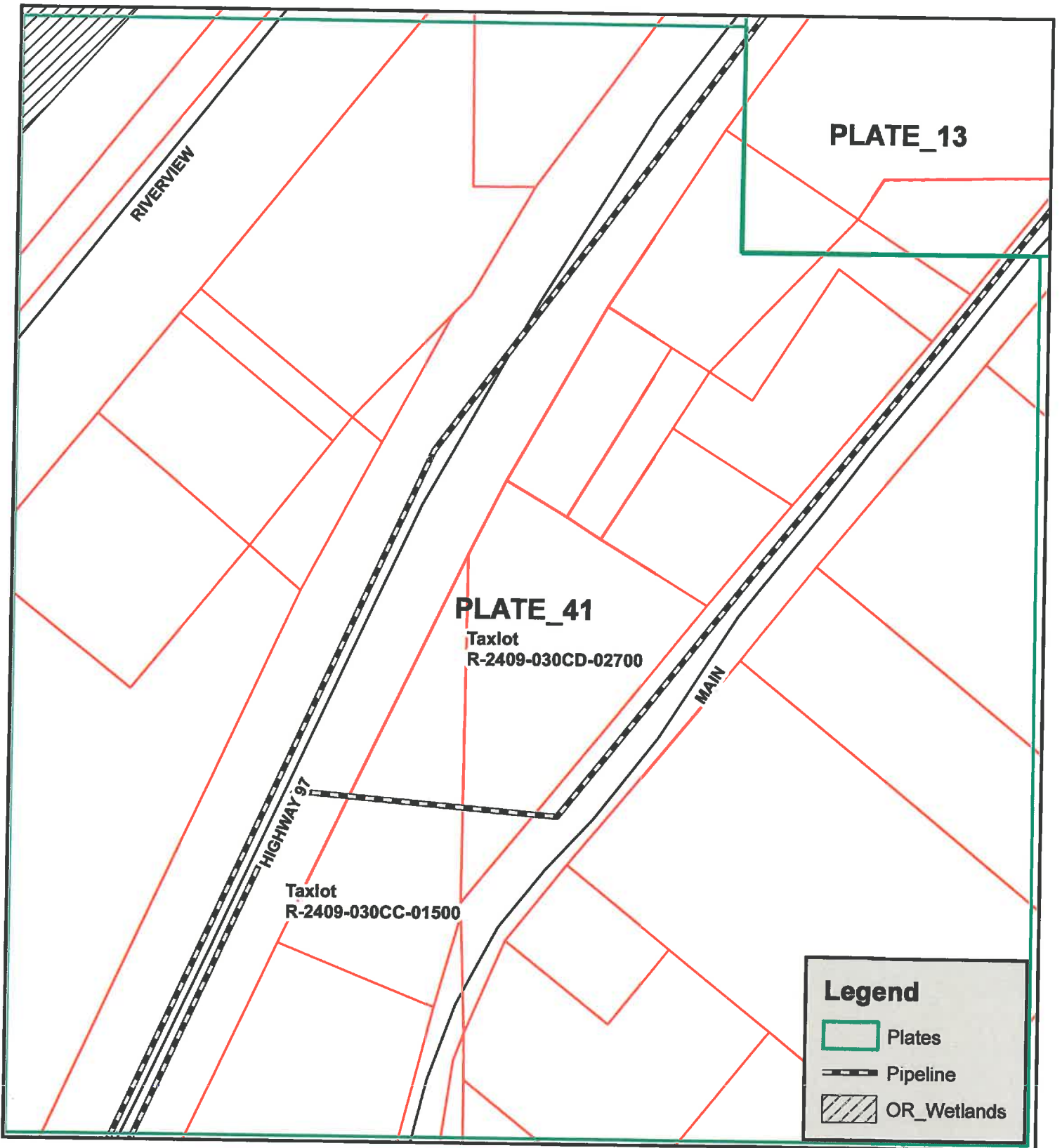
**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



Data Source: National Agriculture Imagery Program (NAIP). Flown in Summer 2014. Reproduced by Rabe Consulting for the purpose of this document.



**Crescent Sanitary District
Wastewater System Improvements**

Plate Map

Map Created By: Ruth Olsen
Map Created On: December 14, 2015



Data Source: National
Agriculture Imagery
Program (NAIP). Flown
in Summer 2014.
Reproduced by Rabe
Consulting for the
purpose of this document.

APPENDIX B – REGULATORY AGENCY DATABASES SEARCH RESULTS AND SUPPORTING DOCUMENTATION

Oregon Historic Sites Search Results List

Property Name	Address/Location	City	County	Yr Built	Elig	NR Stat
Gilchrist Mall		Gilchrist	Klamath	1939	EC	
Gilchrist Mill Powerhouse		Gilchrist	Klamath	1939	EC	
Gilchrist Theatre		Gilchrist	Klamath	1939	EC	
[House]	138104 Manzanita St	Gilchrist	Klamath	c.1930	NC	

4 Records Found

Elig Codes: ES=elig/signif EC=elig/contr NC=not elig/non-contrib NP=not elig/out of period UN=undetermined XD=demolished
NR Stat Codes: NRI=indiv listed NHD=listed in hist dist NRB=listed indiv and in hist dist NHL=Natl Historic Landmark NS=included in NR listing

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM
COUNTY: Klamath

HIST. NAME: Gilchrist Mill Powerhouse DATE OF CONSTRUCTION: 1938-9
COMMON NAME: Gilchrist Mill ORIGINAL USE: mill
ADDRESS: PRESENT USE: mill
CITY: Gilchrist, OR ARCHITECT:
OWNER: Gilchrist Timber Company BUILDER: Gilchrist Timber Company
T/R/S: T.24s. R.9e. S.19 THEME: industry
MAP NO.: 24 09 19 TAX LOT: 100 STYLE: vernacular
ADDITION: BLDG STRUC. DIST. SITE OBJ.
BLOCK: LOT: QUAD: Crescent

PLAN TYPE/SHAPE: rectangle NO. OF STORIES: 2
FOUNDATION MATERIAL: concrete BASEMENT:
ROOF FORM & MATERIALS: flat, built-up
WALL CONSTRUCTION: masonry STRUCTURAL FRAME: brick
PRIMARY WINDOW TYPE:
EXTERIOR SURFACING MATERIALS: brick
DECORATIVE FEATURES: date
OTHER:
CONDITION: GOOD X FAIR POOR MOVED (DATE)

EXTERIOR ALTERATIONS/ADDITIONS (DATED):

NOTEWORTHY LANDSCAPE FEATURES: mill pond

ASSOCIATED STRUCTURES: mill buildings, town

KNOWN ARCHEOLOGICAL FEATURES: none

SETTING: the Gilchrist Mill is located in a small industrial community

STATEMENT OF SIGNIFICANCE (Historical and/or architectural importance, dates, events, persons, contexts).

The Gilchrist Mill, which includes several historic buildings as well as newer structures, was designed and built in 1938-1939, as the national depression diminished and central Oregon's timber-based economy was returning to capacity. The Gilchrist company had acquired timber lands in the area during the first decade of this century. In 1938, they moved their manufacturing operations from Mississippi and built the mill and company town in northern Klamath County.

The brick powerhouse is the most striking of the original buildings on the mill site.

SOURCES:

NEGATIVE NO:
SLIDE NO:

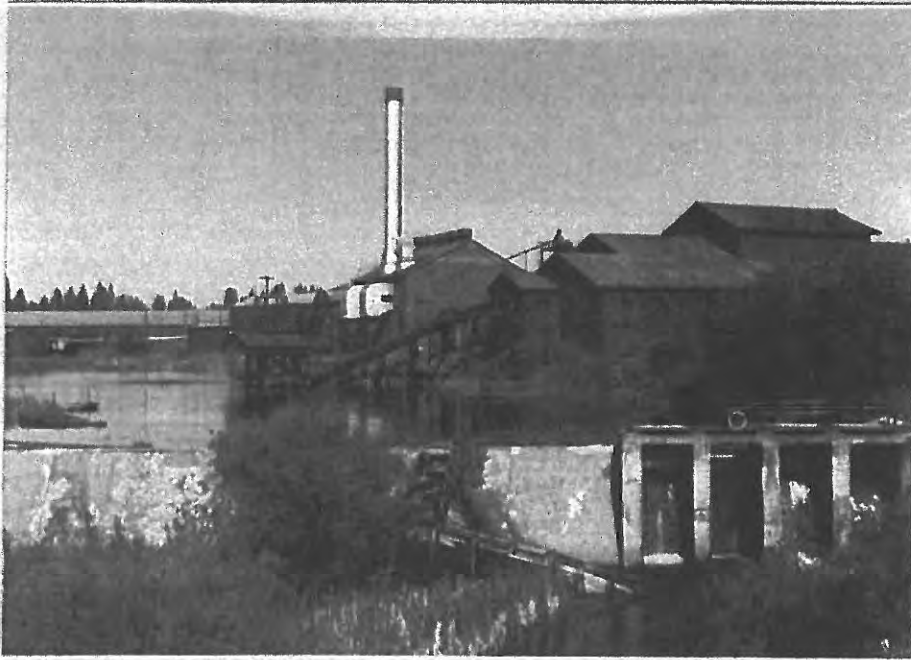
RECORDED BY Ward Tonsfeldt
DATE: 6/90
SHPO INVENTORY NO.:

341

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM - TWO

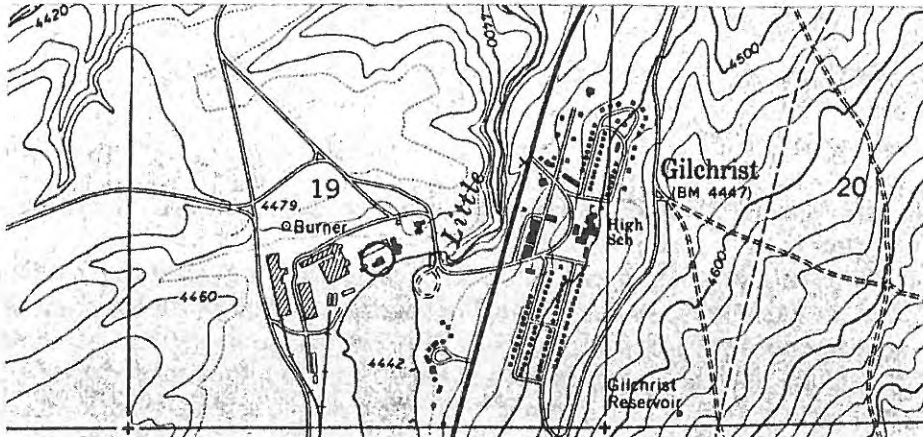
NAME: Gilchrist Mill Powerhouse
ADDRESS:

T/R/S: T.24s. R.9e. S.19
MAP NO.: 24 09 19 TAX LOT: 100
QUADRANGLE: Crescent



NEGATIVE NO.:

SLIDE NO.:



GRAPHIC & PHOTO SOURCES: Ward Tonsfeldt Photos
USGS Maps

SHPO INVENTORY NO.

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM
COUNTY: Klamath

HIST. NAME: Gilchrist Mall
COMMON NAME:
ADDRESS:
CITY: Gilchrist, OR
OWNER: Gilchrist Timber Company

DATE OF CONSTRUCTION: 1938-9
ORIGINAL USE: retail
PRESENT USE: retail
ARCHITECT: Hollis Johnson
BUILDER: Gilchrist Company
THEME: commerce
STYLE: Oregon rustic elements

T/R/S: T.24s. R.9e. S.19, 20
MAP NO.: 24 09 19 TAX LOT: 100

ADDITION:
BLOCK: LOT: QUAD: Crescent

BLDG STRUC. DIST. SITE OBJ.

PLAN TYPE/SHAPE: irregular
FOUNDATION MATERIAL: concrete, stone veneer
ROOF FORM & MATERIALS: hip, composition
WALL CONSTRUCTION: frame
PRIMARY WINDOW TYPE: fixed, large mullion and hexagonal
EXTERIOR SURFACING MATERIALS: horizontal siding
DECORATIVE FEATURES: cupolas, painted motif
OTHER:

NO. OF STORIES: 1.5, 2
BASEMENT: no

STRUCTURAL FRAME: wood

CONDITION: GOOD X FAIR POOR MOVED (DATE)

EXTERIOR ALTERATIONS/ADDITIONS (DATED): minor alterations to retail storefronts

NOTEWORTHY LANDSCAPE FEATURES: ponderosa pines, lawn

ASSOCIATED STRUCTURES: town, mill

KNOWN ARCHEOLOGICAL FEATURES: none

SETTING: Gilchrist is a company-owned industrial community

STATEMENT OF SIGNIFICANCE (Historical and/or architectural importance, dates, events, persons, contexts).

The Gilchrist Mall was designed and built in 1938-1939, as the national depression diminished and central Oregon's timber-based economy was returning to capacity. The Gilchrist company had acquired timber lands in the area during the first decade of this century. In 1938, they moved their manufacturing operations from Mississippi and built the mill and company town in northern Klamath County.

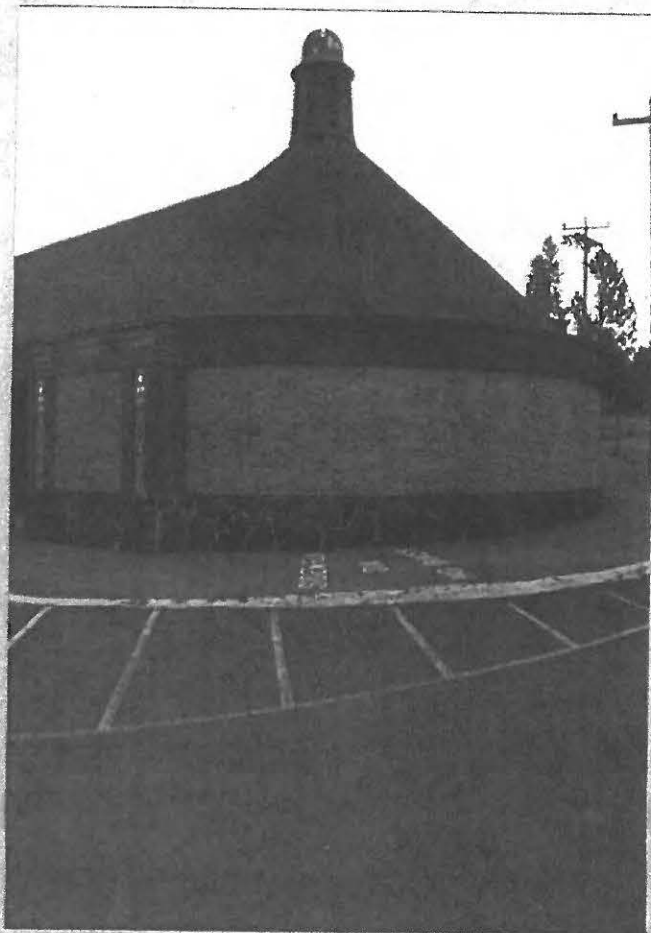
The Gilchrist Mall is significant for its historical connection with the Gilchrist firm, but it is also significant as the earliest retail mall in Klamath County, and possibly in Oregon. Architect Hollis Johnson conceived the mall as center of retail and service businesses, and it has continued this function for 50 years. Design elements of the mall include the massive hip roofs, the cupolas and clock tower, and the designs painted at the entries.

SOURCES: Jim Fisher, Gilchrist: the First Fifty Years (Gilchrist, Oregon: 1988)

NEGATIVE NO: G-27-35
SLIDE NO: SC-19-22

RECORDED BY Ward Tonsfeldt
DATE: 6/90
SHPO INVENTORY NO.:

342



Gilchrist Mall, Klamath County, T24S R9E S.19,20. Tax Lot: 100

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM
COUNTY: Klamath

HIST. NAME: Gilchrist Theatre
COMMON NAME: Gilchrist Theatre
ADDRESS:
CITY: Gilchrist, OR
OWNER: Gilchrist Timber Company

DATE OF CONSTRUCTION: 1939
ORIGINAL USE: theatre
PRESENT USE: theatre
ARCHITECT: Hollis Johnson
BUILDER: Gilchrist Company
THEME: culture/architecture
STYLE:

T/R/S: T.24s. R.9e. S.19,20
MAP NO.: 24 09 19 TAX LOT: 100
ADDITION:
BLOCK: LOT: QUAD: Crescent

BLDG STRUC. DIST. SITE OBJ.

PLAN TYPE/SHAPE: rectangle
FOUNDATION MATERIAL: concrete
ROOF FORM & MATERIALS:
WALL CONSTRUCTION: frame
PRIMARY WINDOW TYPE:
EXTERIOR SURFACING MATERIALS:
DECORATIVE FEATURES:
OTHER:

NO. OF STORIES: 1
BASEMENT: no

STRUCTURAL FRAME: wood

CONDITION: GOOD FAIR POOR MOVED (DATE)

EXTERIOR ALTERATIONS/ADDITIONS (DATED):

NOTEWORTHY LANDSCAPE FEATURES:

ASSOCIATED STRUCTURES:

KNOWN ARCHEOLOGICAL FEATURES:

SETTING: Gilchrist is a company-owned industrial community.

STATEMENT OF SIGNIFICANCE (Historical and/or architectural importance, dates, events, persons, contexts).

The Gilchrist Mall, which includes the theatre as a separate building, was designed and built in 1938-1939, as the national depression diminished and central Oregon's timber-based economy was returning to capacity. The Gilchrist company had acquired timber lands in the area during the first decade of this century. In 1938, they moved their manufacturing operations from Mississippi and built the mill and company town in northern Klamath County.

SOURCES:

NEGATIVE NO:
SLIDE NO:

RECORDED BY Ward Tonsfeldt
DATE: 6/90
SHPO INVENTORY NO.:

343

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM - TWO

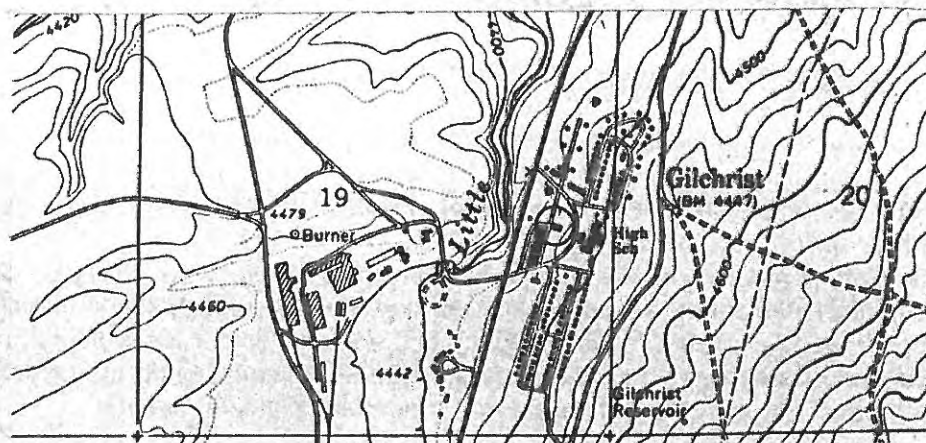
NAME: Gilchrist Theatre
ADDRESS:

T/R/S: T.24s. R.9e. S.19,20
MAP NO.: 24 09 19 TAX LOT: 100
QUADRANGLE: Crescent



NEGATIVE NO.:

SLIDE NO.:



GRAPHIC & PHOTO SOURCES: Ward Tonsfeldt Photos
USGS Maps

SHPO INVENTORY NO.

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM - TWO

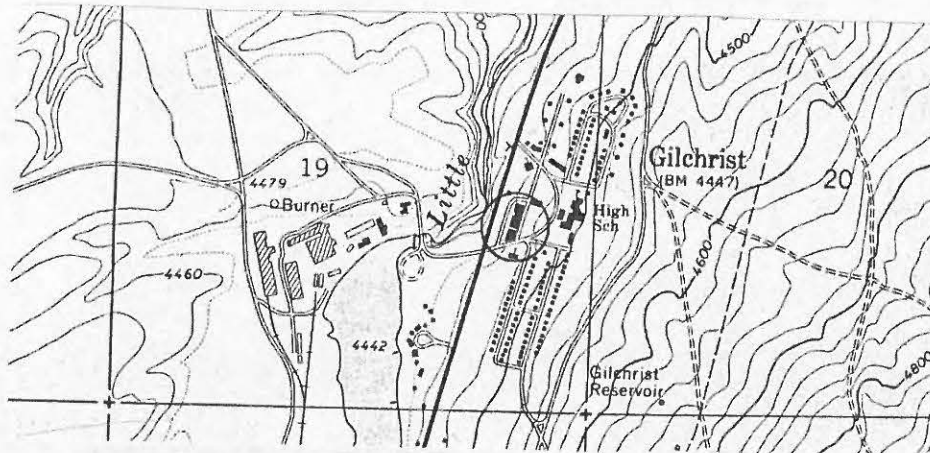
NAME: Gilchrist Mall
ADDRESS:

T/R/S: T.24s. R.9e. S.19, 20
MAP NO.: 24 09 19 TAX LOT: 100
QUADRANGLE: Crescent



NEGATIVE NO.: G-27-35

SLIDE NO.: SC-19-22



GRAPHIC & PHOTO SOURCES: Ward Tonsfeldt Photos
USGS Maps

SHPO INVENTORY NO.

Oregon Historic Sites Search Results List

Property Name	Address/Location	City	County	Yr Built	Elig	NR Stat
Brock Cabin	<i>* not in project area</i>	Crescent	Klamath	1927	EC	
Crescent School		Crescent	Klamath	1916	EC	
Little Meadows		Crescent	Klamath		UN	
Bracken's Store	Hwy 97	Crescent	Klamath	1911	EC	
Rourk Store	Hwy 97	Crescent	Klamath	1919	EC	

5 Records Found

Elig Codes: ES=elig/signif EC=elig/contr NC=not elig/non-contrib NP=not elig/out of period UN=undetermined XD=demolished
 NR Stat Codes: NRI=indiv listed NHD=listed in hist dist NRB=listed indiv and in hist dist NHL=Natl Historic Landmark NS=included in NR listing

**not in project area*

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM - TWO

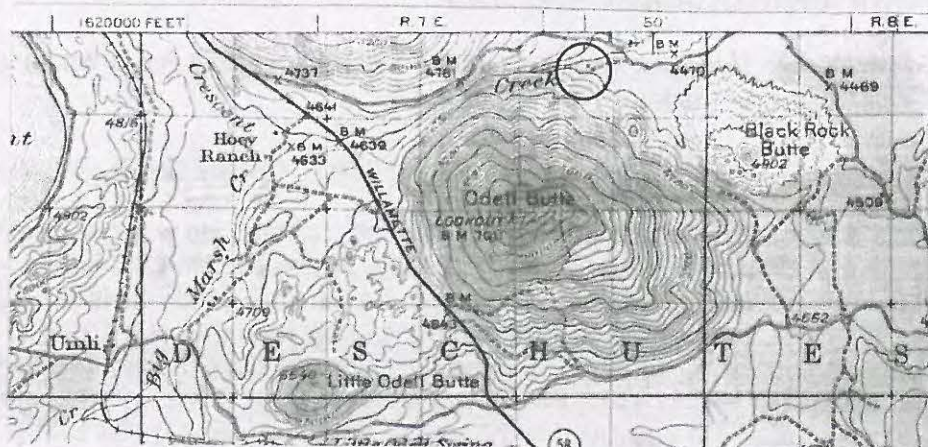
NAME: Brock Cabin
ADDRESS:

T/R/S: T.24s. R.7e. S.14
MAP NO.: 24 07 TAX LOT: 1300
QUADRANGLE: Chemult



NEGATIVE NO.:

SLIDE NO.:



GRAPHIC & PHOTO SOURCES: Ward Tonsfeldt Photos
USGS Maps

SHPO INVENTORY NO.:

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM
COUNTY: Klamath

HIST. NAME: Crescent, OR School

DATE OF CONSTRUCTION: 1916

COMMON NAME:

ORIGINAL USE: schoolhouse

ADDRESS:

PRESENT USE: church

CITY: Crescent, OR 97733

ARCHITECT:

OWNER: First Baptist Church

BUILDER:

Box 203, Crescent, OR 97733

THEME: education

T/R/S: T.24s. R.9e. S.30

STYLE: eclectic

MAP NO.: 24 09 30CD TAX LOT: 3900

ADDITION:

BLDG STRUC. DIST. SITE OBJ.

BLOCK: LOT: QUAD: Chemult

PLAN TYPE/SHAPE: rectangle

NO. OF STORIES: 1

FOUNDATION MATERIAL: concrete

BASEMENT: no

ROOF FORM & MATERIALS: hip, composition

WALL CONSTRUCTION: frame

STRUCTURAL FRAME: wood

PRIMARY WINDOW TYPE: 1/1 double hung (original)

EXTERIOR SURFACING MATERIALS: weatherboard

DECORATIVE FEATURES: bell tower

OTHER:

CONDITION: GOOD X FAIR POOR MOVED (DATE)

EXTERIOR ALTERATIONS/ADDITIONS (DATED): extensive additions

NOTEWORTHY LANDSCAPE FEATURES:

ASSOCIATED STRUCTURES: teacher cottage located one lot north of schoolhouse

KNOWN ARCHEOLOGICAL FEATURES:

SETTING: residential street in Crescent, OR

STATEMENT OF SIGNIFICANCE (Historical and/or architectural importance, dates, events, persons, contexts).

The first Crescent Schoolhouse was built in 1905 on the same property. Byron and Emma Steevens donated a portion (approximately 2 acres) of their homestead to build the second school building. It was completed in January, 1916. The building cost \$3,000.00. The first schoolhouse was the one room style. The second schoolhouse was two rooms with a large hallway partially used for children's storage of clothing and lunches. Two outhouses were located on the back of the property. The Gilchrist School was completed in 1939, transferring Crescent students to the new school.

SOURCES: Klamath Falls Herald and News, Bend Bulletin, Josephine Ringo Gilbertson, Boyd Steevens, Leah Collins Menefee, Henrietta Andrews Moskal, Klamath County School District, Roy Moore, Edward Gray, An Illustrated History of Early Northern Klamath County, Oregon, (Bend, Oregon: Maverick Press, 1989).

NEGATIVE NO:

RECORDED BY Edward Gray

SLIDE NO:

DATE: 6/90

SHPO INVENTORY NO.:

346

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM
COUNTY: Klamath

HIST. NAME: Rourk Store
COMMON NAME: Blay Store & Cabins
ADDRESS: Highway 97
CITY: Crescent, OR 97733
OWNER: Roy Sigler
PO Box 777, Gilchrist OR 97737
T/R/S: T.24s R.9e. S.30
MAP NO.: 24 09 30CA TAX LOT: 5800
ADDITION:
BLOCK: LOT: QUAD: Chemult

DATE OF CONSTRUCTION: 1919
ORIGINAL USE: General Merchandise
PRESENT USE: Church
ARCHITECT: Unknown
BUILDER: Edward Rourk
THEME: commerce
STYLE: vernacular

BLDG STRUC. DIST. SITE OBJ.

PLAN TYPE/SHAPE:
FOUNDATION MATERIAL: cement piers
ROOF FORM & MATERIALS: composition shingles
WALL CONSTRUCTION: 2 X 4
PRIMARY WINDOW TYPE:
EXTERIOR SURFACING MATERIALS: Board and bat
DECORATIVE FEATURES:
OTHER:
CONDITION: GOOD X FAIR POOR MOVED X (DATE) 1928

NO. OF STORIES: 1
BASEMENT: no
STRUCTURAL FRAME:

EXTERIOR ALTERATIONS/ADDITIONS (DATED): Addition added in the 1930's to southside when it was known as Blay Store & Cabins
NOTEWORTHY LANDSCAPE FEATURES:
ASSOCIATED STRUCTURES:
KNOWN ARCHEOLOGICAL FEATURES:

SETTING: One of two original store buildings still being used in Crescent, Oregon. This is the oldest structure in Northern Klamath County.

STATEMENT OF SIGNIFICANCE (Historical and/or architectural importance, dates, events, persons, contexts).

Edward Rourk opened this store in November, 1909. The store was moved in 1910 to the southwest corner of Main and Jones Streets, Crescent, Oregon. The Rourk Store was the first built north of Fort Klamath, Klamath County, Oregon. The building served as a post office from 1910-1927. Edward Rourk was the second postmaster of Crescent (1910-1914). Mr. Rourk died in 1925. His widow, Bessie Rourk married Ora Blay in 1926. With the completion of Highway 97, the store was moved to its present location in 1928 and became known as the Blay Store & Cabins. Ora Blay sold his properties in Crescent in the 1950's. The building was used for various businesses; real estate office, clothing store, deli and became the Crescent Christian Fellowship Church in 1984. Roy Sigler has owned the property since 1974. In 1988, the Klamath County Historical Landmark Commission placed a historical sign on the property.

SOURCES: Betty Daly Seems, Clinton Snodgrass, Tom Reed, Bend Bulletin. Edward Gray, An Illustrated History of Early North Klamath County, Oregon, (Bend, Oregon: Maverick Press, 1989). Roy Sigler.

NEGATIVE NO:
SLIDE NO:

RECORDED BY Edward Gray
DATE: 6/90
SHPO INVENTORY NO.:

347

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY FORM
COUNTY: Klamath

HIST. NAME: Bracken's Store
COMMON NAME: Wirtz Place
ADDRESS: Highway 97
CITY: Crescent, OR 97733
OWNER: A.J. Wirtz, Box 195
Crescent, OR 97733
T/R/S: T.24s. R.9e. S.30
MAP NO.: 24 09 30CA TAX LOT: 2500,
ADDITION:
BLOCK: LOT: QUAD: Chemult

DATE OF CONSTRUCTION: 1911
ORIGINAL USE: general merchandise
PRESENT USE: second-hand store
ARCHITECT: unknown
BUILDER: William Baldwin
THEME: commerce
STYLE: vernacular
2600, 2700
BLDG STRUC. DIST. SITE OBJ.

PLAN TYPE/SHAPE: rectangle
FOUNDATION MATERIAL: masonry
ROOF FORM & MATERIALS: gable, metal
WALL CONSTRUCTION: frame
PRIMARY WINDOW TYPE: 1/1 double hung
EXTERIOR SURFACING MATERIALS: horizontal siding
DECORATIVE FEATURES: false front
OTHER:
CONDITION: GOOD X FAIR POOR MOVED (DATE)

NO. OF STORIES: 1
BASEMENT: no
STRUCTURAL FRAME: wood

EXTERIOR ALTERATIONS/ADDITIONS (DATED): shed added to north side of original building in 1970's

NOTEWORTHY LANDSCAPE FEATURES:

ASSOCIATED STRUCTURES:

KNOWN ARCHEOLOGICAL FEATURES:

SETTING: highway commerce

STATEMENT OF SIGNIFICANCE (Historical and/or architectural importance, dates, events, persons, contexts).

Built in 1911 and originally the Bracken and Funk Billiards Pool Hall. Thomas Bracken went into partnership with Frank Funk of Redmond, Oregon in 1913 to form a grocery business. Funk sold out his interest to Bracken in 1918. In 1927, Bracken became the Crescent, Oregon postmaster. The building was used as a post office and store until the 1940s. Thomas Bracken died in Bend in 1955 at the age of 85. The Bracken Store and property was deeded to the Sisters of Saint Francis of Bend. Mick Wirtz bought the store in the 1970s.

SOURCES: Mick Wirtz, Don and Leah Collins Menefee, Tom Reed, Jack Casey, Bernard Griffin, Klamath County Records and Deeds, Edward Gray, An Illustrated History of Early Northern Klamath County, Oregon, (Bend, Oregon: Maverick Press, 1989)

NEGATIVE NO:
SLIDE NO:

RECORDED BY Edward Gray
DATE: 6/90
SHPO INVENTORY NO.:

345

A & L WESTERN AGRICULTURAL LABORATORIES

1311 WOODLAND AVE #1 • MODESTO, CALIFORNIA 95351 • (209) 529-4080 • FAX (209) 529-4736



REPORT NUMBER: 15-296-064

CLIENT: 9999-D

SUBMITTED BY: ANDREA RABE

SEND TO: RABE CONSULTING
421 COMMERCIAL ST
KLAMMATH FALLS, OR 97264-

GROWER:

DATE OF REPORT: 10/28/15

IRRIGATION WATER ANALYSIS REPORT

PAGE: 1

Sample ID	Lab Number	Sodium Na meq/L	Calcium Ca meq/L	Magnesium Mg meq/L	Carbonate CO ₃ meq/L	Bicarbonate HCO ₃ meq/L	Chloride Cl meq/L	Conductivity E.C. dS/m	pH	Copper Cu ppm	Iron Fe ppm	Manganese Mn ppm	Zinc Zn ppm
GC#1	60663	0.17	0.20	0.08	0.00	0.51	0.06	0.06	7.4				
GC#2	60664	0.17	0.20	0.08	0.00	0.51	0.06	0.06	7.4				
GC#3	60665	0.17	0.20	0.08	0.00	0.51	0.06	0.06	7.4				

Sample ID	Phosphorus P ppm	Potassium K ppm	Nitrate NO ₃ ppm	Sulfate SO ₄ ppm	Boron B ppm	Dissolved Solids ppm	Adjusted S.A.R.	Langelier Saturation Index	NOTES:
GC#1	0.03	1.9	< 2	1	0.02	45	0.24		This report applies only to the sample(s) tested. Samples are retained a maximum of thirty days after testing. <i>Phoebe Gordon</i> Phoebe Gordon, Ph.D. A & L WESTERN LABORATORIES, INC.
GC#2	0.04	1.7	< 2	1	0.01	45	0.24		
GC#3	0.04	1.8	< 2	1	0.01	45	0.24		

SPRING STREET ANALYTICAL

350 S. Spring Street
 Klamath Falls, OR 97601
 Phone: (541)882-6286
 Fax: (541)882-9561

ORELAP: OR100034, ELAP: 2596CA
 Water Testing
 Waste Water Testing
 Environmental Consulting

Sample Matrix: Water
 Collection Date & Time: 10/22/15
 Received Date & Time: 10/22/15 & 130P
 Date Reported: 10/23/15


Rabe Consulting
 421 Commercial St
 Klamath Falls OR 97601

The samples submitted were analyzed for Total and E. Coli bacteria. The results are listed below:

Sample ID #	Source	Analysis	Results	Date Analyzed	Initials
Q15-307	GC-1	Total Coliform	>2419.6 MPN/100ml	10/22/15	KS
		E. Coli	9.7 MPN/100ml		
Q15-308	GC-2	Total Coliform	214.3 MPN/100ml		
		E. Coli	4.1 MPN/100ml		
Q15-309	GC-3	Total Coliform	187.2 MPN/100ml		
		E. Coli	4.1 MPN/100ml		

Farthest North
 middle up from Mill Pond
 upstream (South)

- Method SM9223B, 19th edition CT/100mL
- Spring Street Analytical certifies that all analyses and reporting are done according to the NELAP standards.

Analyzed by 
 Kristen Staebler
 Lab Director

Printed 10/16/15



Threatened, Endangered, and Candidate Fish and Wildlife Species in Oregon

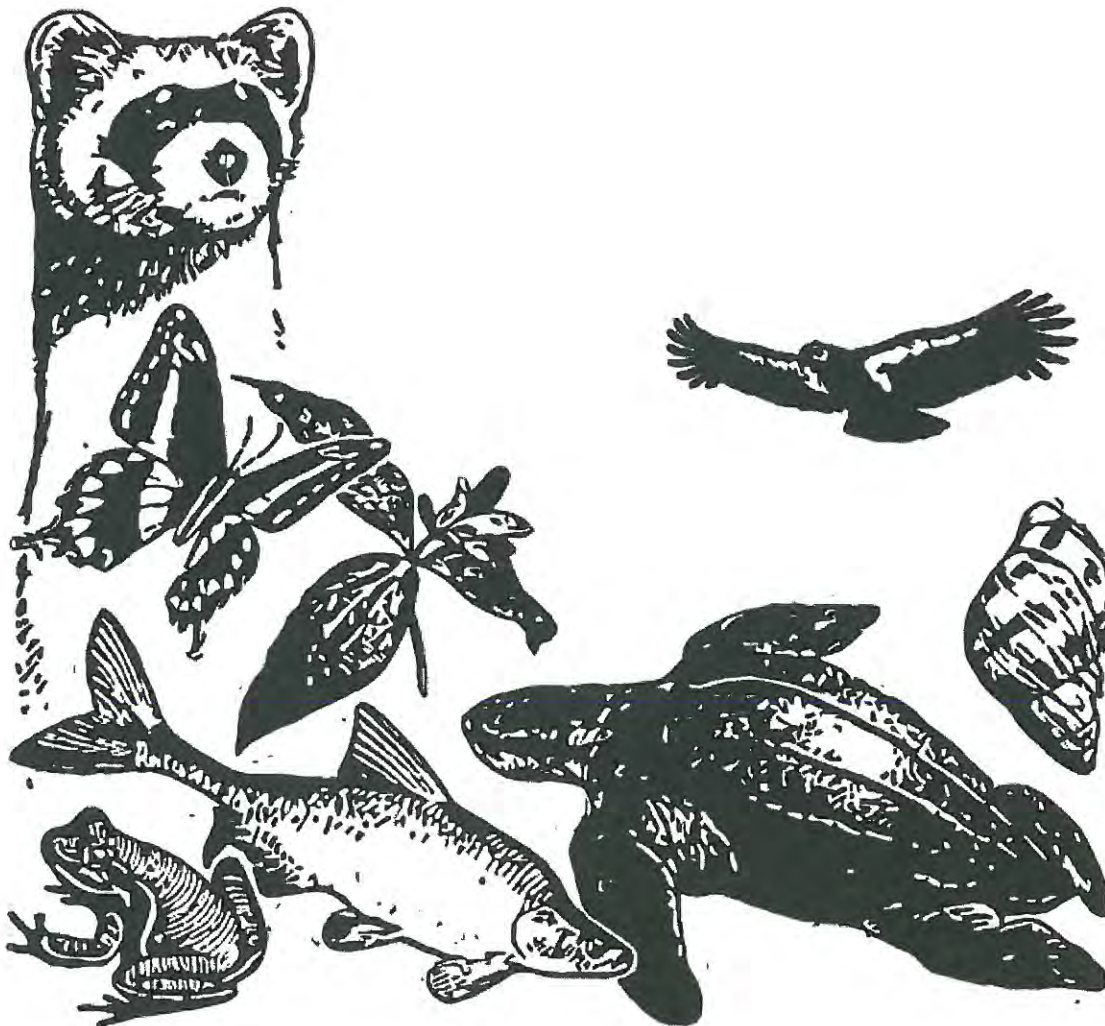
Common Name	Scientific Name	State status*	Federal status
FISH			
Borax Lake Chub	<i>Gila boraxobius</i>	E	E
Bull Trout (Range-wide)	<i>Salvelinus confluentus</i>		T
Columbia River Chum Salmon	<i>Oncorhynchus keta</i>		T
Foskett Speckled Dace	<i>Rhinichthys osculus</i> ssp	T	T
Green sturgeon (Southern DPS)	<i>Acipenser medirostris</i>		T
Hutton Spring Tui Chub	<i>Gila bicolor</i> ssp.	T	T
Lahontan Cutthroat Trout	<i>Oncorhynchus clarki henshawi</i>	T	T
Lost River Sucker	<i>Deltistes luxatus</i>	E	E
Lower Columbia River Chinook Salmon	<i>Oncorhynchus tshawytscha</i>		T
Lower Columbia River Coho Salmon	<i>Oncorhynchus kisutch</i>	E	T
Lower Columbia River Steelhead	<i>Oncorhynchus mykiss</i>		T
Middle Columbia River Steelhead	<i>Oncorhynchus mykiss</i>		T
Modoc sucker	<i>Catostomus microps</i>		E
Oregon Chub	<i>Oregonichthys crameri</i>		T
Oregon Coast Coho Salmon	<i>Oncorhynchus kisutch</i>		T
Pacific Eulachon/Smelt (Southern DPS)	<i>Thaleichthys pacificus</i>		T
Shortnose Sucker	<i>Chasmistes brevirostris</i>	E	E
Snake River Chinook Salmon (Fall)	<i>Oncorhynchus tshawytscha</i>	T	T
Snake River Chinook Salmon (Spring/Summer)	<i>Oncorhynchus tshawytscha</i>	T	T
Snake River Sockeye Salmon	<i>Oncorhynchus nerka</i>		E
Snake River Steelhead	<i>Oncorhynchus mykiss</i>		T
Southern Oregon Coho Salmon	<i>Oncorhynchus kisutch</i>		T
Upper Columbia River Spring Chinook Salmon	<i>Oncorhynchus tshawytscha</i>		E
Upper Columbia River Steelhead	<i>Oncorhynchus mykiss</i>		E
Upper Willamette River Chinook Salmon	<i>Oncorhynchus tshawytscha</i>		T
Upper Willamette River Steelhead	<i>Oncorhynchus mykiss</i>		T
Warner Sucker	<i>Catostomus warnerensis</i>	T	T
AMPHIBIANS AND REPTILES			
Columbia spotted frog	<i>Rana luteiventris</i>		C
Green Sea Turtle	<i>Chelonia mydas</i>	E	T
Leatherback Sea Turtle	<i>Dermochelys coriacea</i>	E	E
Loggerhead Sea Turtle	<i>Caretta caretta</i>	T	E
Oregon spotted frog	<i>Rana pretiosa</i>		T
Pacific Ridley Sea Turtle	<i>Lepidochelys olivacea</i>	T	T
BIRDS			
Brown Pelican	<i>Pelecanus occidentalis</i>	E	
California Least Tern	<i>Sterna antillarum browni</i>	E	E
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	T	T
Northern Spotted Owl	<i>Strix occidentalis caurina</i>	T	T
Short-tailed Albatross	<i>Diomedea albatrus</i>	E	E
Streaked horned lark	<i>Eremophila alpestris strigata</i>		T
Western Snowy Plover	<i>Charadrius alexandrinus nivosus</i>	T	T (Coastal population only)
Yellow-billed cuckoo	<i>Coccyzus americanus</i>		PT

Crescent Wastewater

IPaC Trust Resource Report

Generated October 16, 2015 09:50 AM MDT

This report is for informational purposes only and should not be used for planning or analyzing project-level impacts. For projects that require FWS review, please return to this project on the IPaC website and request an official species list from the Regulatory Documents page.



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Crescent Wastewater

PROJECT CODE

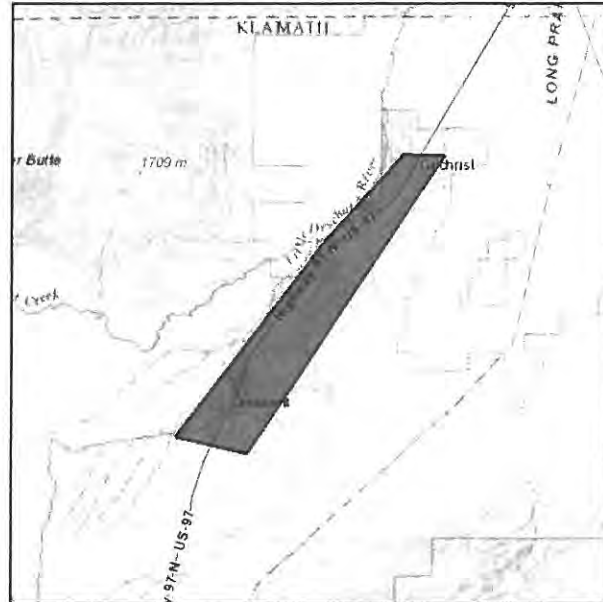
6YWFI-4CVWR-GOLEB-ESNLB-SCGIVE

LOCATION

Klamath County, Oregon

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Oregon Fish And Wildlife Office

2600 Southeast 98th Avenue, Suite 100

Portland, OR 97266-1398

(503) 231-6179

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under Section 7 of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an official species list on the Regulatory Documents page.

Amphibians

Oregon Spotted Frog *Rana pretiosa* Threatened
 CRITICAL HABITAT
 There is **proposed** critical habitat designated for this species.
<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=D02A>

Fishes

Bull Trout *Salvelinus confluentus* Threatened
 CRITICAL HABITAT
 There is **final** critical habitat designated for this species.
<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E065>

Lost River Sucker *Deltistes luxatus* Endangered
 CRITICAL HABITAT
 There is **final** critical habitat designated for this species.
<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E052>

Shortnose Sucker *Chasmistes brevirostris* Endangered
 CRITICAL HABITAT
 There is **final** critical habitat designated for this species.
<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E055>

Flowering Plants

Applegate's Milk-vetch *Astragalus applegatei* Endangered
 CRITICAL HABITAT
No critical habitat has been designated for this species.
<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q25T>

Mammals

Fisher *Martes pennanti*

Proposed Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=A0HS>

Gray Wolf *Canis lupus*

Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=A00D>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

Oregon Spotted Frog Critical Habitat Proposed

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=D02A#crithab>

Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B008	Bird of conservation concern
Brewer's Sparrow <i>Spizella breweri</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HA	Bird of conservation concern
Calliope Hummingbird <i>Stellula calliope</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0K3	Bird of conservation concern
Cassin's Finch <i>Carpodacus cassinii</i> Year-round	Bird of conservation concern
Eared Grebe <i>Podiceps nigricollis</i> Season: Breeding	Bird of conservation concern
Ferruginous Hawk <i>Buteo regalis</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B06X	Bird of conservation concern
Flammulated Owl <i>Otus flammeolus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0DK	Bird of conservation concern
Fox Sparrow <i>Passerella iliaca</i> Season: Breeding	Bird of conservation concern
Green-tailed Towhee <i>Pipilo chlorurus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0IO	Bird of conservation concern
Least Bittern <i>Ixobrychus exilis</i> Season: Breeding	Bird of conservation concern
Lewis's Woodpecker <i>Melanerpes lewis</i> Year-round	Bird of conservation concern
Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY	Bird of conservation concern

Long-billed Curlew <i>Numenius americanus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=B06S	
Olive-sided Flycatcher <i>Contopus cooperi</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=B0AN	
Peregrine Falcon <i>Falco peregrinus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=B0FU	
Rufous Hummingbird <i>selasphorus rufus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=B0E1	
Sage Thrasher <i>Oreoscoptes montanus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=B0ID	
Short-eared Owl <i>Asio flammeus</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=B0HD	
Swainson's Hawk <i>Buteo swainsoni</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=B070	
White Headed Woodpecker <i>Picoides albolarvatus</i>	Bird of conservation concern
Year-round	
Williamson's Sapsucker <i>Sphyrapicus thyroideus</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=B0FX	

Refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to NWI wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Freshwater Emergent Wetland

PEMC	651.0 acres
PEMA	23.7 acres
PEMCh	18.9 acres
PEMCx	11.5 acres
PEMF	1.31 acres

Freshwater Forested/shrub Wetland

PSSC	103.0 acres
PFOA	7.57 acres
PSSA	4.73 acres
PFOC	2.95 acres

Freshwater Pond

PABFx	4.98 acres
PUBFx	2.7 acres
PUBF	1.02 acres
PUSC_x	0.302 acre

Lake

L2ABF_h	34.3 acres
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Riverine

R2UBH	166.0 acres
R4SBC_x	8.49 acres

Status of ESA Listings & Critical Habitat Designations for West Coast Salmon & Steelhead

- PUGET SOUND DOMAIN**
- Puget Sound Chinook (T) [FCH 9/2/05]
 - Hood Canal Summer Chum (T) [FCH 9/2/05]
 - Ozette Lake Sockeye (T) [FCH 9/2/05]
 - Puget Sound Steelhead (T) [CH under dev.; ANPR 1/10/11]

- WILLAMETTE/LOWER COLUMBIA DOMAIN**
- Columbia River Chum (T) [FCH 9/2/05]
 - Lower Columbia River Coho (T) [CH Under dev.; ANPR 1/10/11]
 - Lower Columbia River Chinook (T) [FCH 9/2/05]
 - Lower Columbia River Steelhead (T) [FCH 9/2/05]
 - Upper Willamette River Chinook (T) [FCH 9/2/05]
 - Upper Willamette River Steelhead (T) [FCH 9/2/05]

- OREGON COAST DOMAIN**
- Oregon Coast Coho (T) [FCH 2/11/08]

- SOUTHERN OREGON/NORTHERN CALIFORNIA COAST DOMAIN**
- Southern Oregon/Northern California Coast Coho (T) [FCH 5/5/99]

- NORTH-CENTRAL CALIFORNIA COAST DOMAIN**
- Central California Coast Coho (E) [FCH 5/5/99]
 - California Coastal Chinook (T) [FCH 9/2/05]
 - Northern California Steelhead (T) [FCH 9/2/05]
 - Central California Coast Steelhead (T) [FCH 9/2/05]

- SOUTH-CENTRAL/SOUTHERN CALIFORNIA COAST DOMAIN**
- South-Central California Coast Steelhead (T) [FCH 9/2/05]
 - Southern California Coast Steelhead (E) [FCH 9/2/05]


- INTERIOR COLUMBIA DOMAIN**
- Snake River Sockeye (E) [FCH 12/28/93]
 - Snake River Fall Chinook (T) [FCH 12/28/93]
 - Snake River Spring/Summer Chinook (T) [FCH 12/28/93; 10/25/99]
 - Snake River Steelhead (T) [FCH 9/2/05]
 - Upper Columbia River Spring Chinook (E) [FCH 9/2/05]
 - Upper Columbia River Steelhead (T) [FCH 9/2/05]
 - Middle Columbia River Steelhead (T) [FCH 9/2/05]

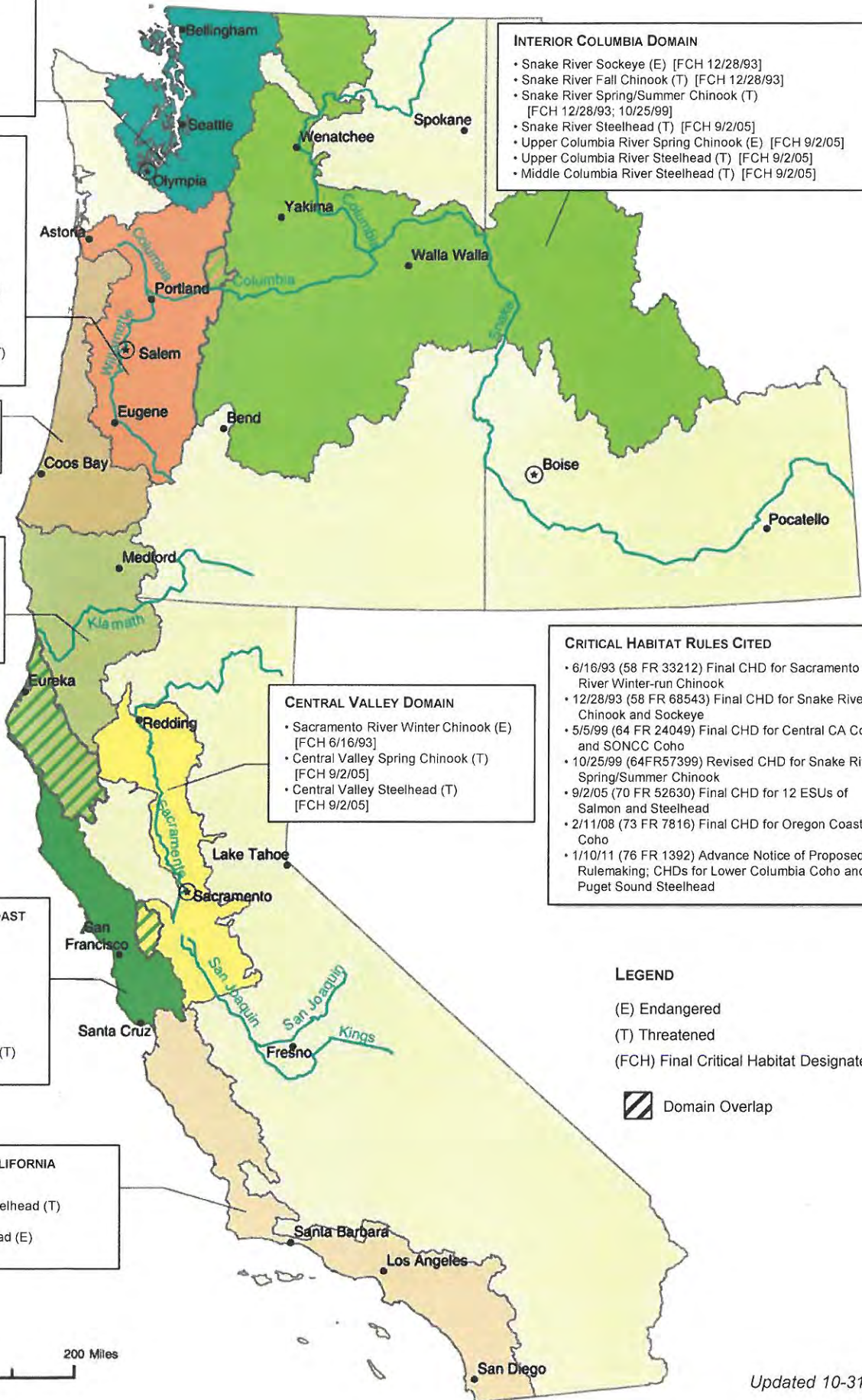
- CENTRAL VALLEY DOMAIN**
- Sacramento River Winter Chinook (E) [FCH 6/16/93]
 - Central Valley Spring Chinook (T) [FCH 9/2/05]
 - Central Valley Steelhead (T) [FCH 9/2/05]

- CRITICAL HABITAT RULES CITED**
- 6/16/93 (58 FR 33212) Final CHD for Sacramento River Winter-run Chinook
 - 12/28/93 (58 FR 68543) Final CHD for Snake River Chinook and Sockeye
 - 5/5/99 (64 FR 24049) Final CHD for Central CA Coast and SONCC Coho
 - 10/25/99 (64FR57399) Revised CHD for Snake River Spring/Summer Chinook
 - 9/2/05 (70 FR 52630) Final CHD for 12 ESUs of Salmon and Steelhead
 - 2/11/08 (73 FR 7816) Final CHD for Oregon Coast Coho
 - 1/10/11 (76 FR 1392) Advance Notice of Proposed Rulemaking; CHDs for Lower Columbia Coho and Puget Sound Steelhead

LEGEND

(E) Endangered
(T) Threatened
(FCH) Final Critical Habitat Designated

 Domain Overlap



FAA airport list

City	Type	LocationID	Region	State	County
ADAMS	HELIPORT	'OR18	ANM	OR	UMATILLA
ALBANY	AIRPORT	'S12	ANM	OR	LINN
ALBANY	AIRPORT	'OR20	ANM	OR	BENTON
ALBANY	AIRPORT	'4OR3	ANM	OR	LINN
ALBANY	AIRPORT	'OR21	ANM	OR	LINN
ALBANY	AIRPORT	'OR67	ANM	OR	LINN
ALBANY	AIRPORT	'OR19	ANM	OR	LINN
ALBANY	AIRPORT	'OR22	ANM	OR	LINN
ALBANY	AIRPORT	'9OR8	ANM	OR	LINN
ALFALFA	AIRPORT	'50OR	ANM	OR	CROOK
ALKALI LAK	AIRPORT	'R03	ANM	OR	LAKE
AMITY	AIRPORT	'64OR	ANM	OR	POLK
AMITY	AIRPORT	'18OR	ANM	OR	YAMHILL
AMITY	AIRPORT	'OG44	ANM	OR	YAMHILL
ANDREWS	AIRPORT	'OG53	ANM	OR	HARNEY
ANTELOPE	AIRPORT	'2OR1	ANM	OR	WASCO
ARLINGTON	AIRPORT	'1S8	ANM	OR	GILLIAM
AROCK	AIRPORT	'OR16	ANM	OR	MALHEUR
ASHLAND	AIRPORT	'S03	ANM	OR	JACKSON
ASHLAND	HELIPORT	'65OR	ANM	OR	JACKSON
ASTORIA	AIRPORT	'AST	ANM	OR	CLATSOP
ASTORIA	HELIPORT	'OG03	ANM	OR	CLATSOP
ASTORIA	AIRPORT	'OR23	ANM	OR	CLATSOP
ASTORIA	HELIPORT	'OG56	ANM	OR	CLATSOP
AUMSVILLE	AIRPORT	'OR25	ANM	OR	MARION
AURORA	AIRPORT	'UAO	ANM	OR	MARION
AURORA	HELIPORT	'OR68	ANM	OR	MARION
AURORA	HELIPORT	'OR24	ANM	OR	CLACKAMA
BAKER	HELIPORT	'93OR	ANM	OR	BAKER
BAKER CITY	AIRPORT	'BKE	ANM	OR	BAKER
BAKER CITY	AIRPORT	'OG45	ANM	OR	BAKER
BAKER CITY	HELIPORT	'OG47	ANM	OR	BAKER
BALLSTON	AIRPORT	'OR71	ANM	OR	POLK
BANDON	AIRPORT	'S05	ANM	OR	COOS
BANKS	AIRPORT	'OR27	ANM	OR	WASHINGT
BANKS	HELIPORT	'9OR7	ANM	OR	WASHINGT
BANKS	AIRPORT	'OG02	ANM	OR	WASHINGT
BEATTY	AIRPORT	'87OR	ANM	OR	KLAMATH
BEAVER M.	AIRPORT	'2S2	ANM	OR	KLAMATH
BEAVERTO	HELIPORT	'86OR	ANM	OR	WASHINGT
BEAVERTO	AIRPORT	'OR00	ANM	OR	WASHINGT
BEAVERTO	AIRPORT	'OR28	ANM	OR	WASHINGT
BEAVERTO	HELIPORT	'53OR	ANM	OR	WASHINGT
BEND	AIRPORT	'BDN	ANM	OR	DESCHUTE
BEND	AIRPORT	'OR30	ANM	OR	DESCHUTE
BEND	AIRPORT	'OR29	ANM	OR	DESCHUTE

BEND	HELIPORT	'OR15	ANM	OR	DESCHUTE
BEND	AIRPORT	'43OR	ANM	OR	DESCHUTE
BEND	AIRPORT	'5OR5	ANM	OR	DESCHUTE
BEND	AIRPORT	'OR04	ANM	OR	DESCHUTE
BEND	AIRPORT	'8OR5	ANM	OR	DESCHUTE
BEND	HELIPORT	'54OR	ANM	OR	DESCHUTE
BEND	AIRPORT	'OG05	ANM	OR	DESCHUTE
BLY	AIRPORT	'85OR	ANM	OR	KLAMATH
BLY	AIRPORT	'80OR	ANM	OR	KLAMATH
BOARDMA	AIRPORT	'M50	ANM	OR	MORROW
BOARDMA	HELIPORT	'38OR	ANM	OR	MORROW
BORING	AIRPORT	'OR72	ANM	OR	CLACKAMA
BORING	AIRPORT	'OR35	ANM	OR	CLACKAMA
BORING	AIRPORT	'6OR7	ANM	OR	CLACKAMA
BROOKING	AIRPORT	'BOK	ANM	OR	CURRY
BROOKING	HELIPORT	'OR36	ANM	OR	CURRY
BROOKS	AIRPORT	'OR38	ANM	OR	MARION
BROOKS	AIRPORT	'7OR7	ANM	OR	MARION
BROWNLEE	HELIPORT	'OR75	ANM	OR	BAKER
BROWNSV	AIRPORT	'OR94	ANM	OR	LINN
BROWNSV	AIRPORT	'9OR0	ANM	OR	LINN
BURNS	AIRPORT	'BNO	ANM	OR	HARNEY
BURNS	AIRPORT	'OR32	ANM	OR	HARNEY
BURNS	AIRPORT	'81OR	ANM	OR	HARNEY
BUXTON	AIRPORT	'OR61	ANM	OR	WASHINGT
CANBY	AIRPORT	'44OR	ANM	OR	CLACKAMA
CANBY	AIRPORT	'OR40	ANM	OR	CLACKAMA
CANBY	AIRPORT	'OR41	ANM	OR	CLACKAMA
CASCADE L	AIRPORT	'CZK	ANM	OR	HOOD RIVE
CAVE JUNC	AIRPORT	'3S4	ANM	OR	JOSEPHINE
CENTRAL P	HELIPORT	'OG58	ANM	OR	JACKSON
CENTRAL P	HELIPORT	'2OG2	ANM	OR	JACKSON
CHILOQUIN	AIRPORT	'2S7	ANM	OR	KLAMATH
CHRISTMA	AIRPORT	'62S	ANM	OR	LAKE
CHRISTMA	AIRPORT	'OG06	ANM	OR	LAKE
CLACKAMA	HELIPORT	'76OR	ANM	OR	CLACKAMA
CLEARWAT	AIRPORT	'3S6	ANM	OR	DOUGLAS
COBURG	AIRPORT	'OG48	ANM	OR	LANE
COBURG	AIRPORT	'OR45	ANM	OR	LANE
CONDON	AIRPORT	'OR46	ANM	OR	GILLIAM
CONDON	AIRPORT	'3S9	ANM	OR	GILLIAM
CONDON	AIRPORT	'OR48	ANM	OR	GILLIAM
COOS BAY	HELIPORT	'OR49	ANM	OR	COOS
COQUILLE	AIRPORT	'45OR	ANM	OR	COOS
CORBETT	AIRPORT	'OR50	ANM	OR	MULTNOM
CORNELIUS	AIRPORT	'4S4	ANM	OR	WASHINGT
CORVALIS	AIRPORT	'OG49	ANM	OR	BENTON

CORVALLIS	AIRPORT	'CVO	ANM	OR	BENTON
CORVALLIS	AIRPORT	'OG01	ANM	OR	BENTON
CORVALLIS	AIRPORT	'OR39	ANM	OR	BENTON
CORVALLIS	AIRPORT	'8OR7	ANM	OR	BENTON
CORVALLIS	HELIPORT	'OR55	ANM	OR	BENTON
CORVALLIS	AIRPORT	'55OR	ANM	OR	BENTON
CORVALLIS	AIRPORT	'4OR4	ANM	OR	BENTON
CORVALLIS	AIRPORT	'OR52	ANM	OR	BENTON
CORVALLIS	AIRPORT	'OR54	ANM	OR	BENTON
COTTAGE C	AIRPORT	'61S	ANM	OR	LANE
COVE	AIRPORT	'OG07	ANM	OR	UNION
COVE	AIRPORT	'7OR0	ANM	OR	WALLOWA
CRANE	AIRPORT	'7OR1	ANM	OR	HARNEY
CRESCENT	AIRPORT	'5S2	ANM	OR	KLAMATH
CRESENT L	HELIPORT	'OR33	ANM	OR	KLAMATH
CRESWELL	AIRPORT	'77S	ANM	OR	LANE
CRESWELL	AIRPORT	'OR57	ANM	OR	LANE
CROWLEY	AIRPORT	'78OR	ANM	OR	MALHEUR
CULVER	AIRPORT	'OG00	ANM	OR	JEFFERSON
CULVER	AIRPORT	'5S5	ANM	OR	JEFFERSON
DAYS CREE	AIRPORT	'8OR3	ANM	OR	DOUGLAS
DAYVILLE	AIRPORT	'49OR	ANM	OR	GRANT
DAYVILLE	AIRPORT	'OR13	ANM	OR	GRANT
DIAMOND	AIRPORT	'OR08	ANM	OR	HARNEY
DILLARD	HELIPORT	'66OR	ANM	OR	DOUGLAS
DONALD	HELIPORT	'7WA6	ANM	OR	MARION
DONALD	AIRPORT	'67OR	ANM	OR	MARION
EAGLE POIN	AIRPORT	'0OR5	ANM	OR	JACKSON
EAGLE POIN	HELIPORT	'8OR8	ANM	OR	JACKSON
EAGLE POIN	AIRPORT	'89OR	ANM	OR	JACKSON
EAGLE POIN	AIRPORT	'26OG	ANM	OR	JACKSON
ECHO	AIRPORT	'OL02	ANM	OR	UMATILLA
ELKTON	AIRPORT	'94OR	ANM	OR	DOUGLAS
ELMIRA	AIRPORT	'33OR	ANM	OR	LANE
ENTERPRIS	AIRPORT	'05OR	ANM	OR	WALLOWA
ENTERPRIS	AIRPORT	'OR64	ANM	OR	WALLOWA
ENTERPRIS	AIRPORT	'8S4	ANM	OR	WALLOWA
ENTERPRIS	AIRPORT	'6OR9	ANM	OR	WALLOWA
ESTACADA	AIRPORT	'OR66	ANM	OR	CLACKAMA
ESTACADA	AIRPORT	'OR65	ANM	OR	CLACKAMA
ESTACADA	AIRPORT	'5S9	ANM	OR	CLACKAMA
EUGENE	HELIPORT	'05OG	ANM	OR	LANE
EUGENE	HELIPORT	'17OG	ANM	OR	LANE
EUGENE	AIRPORT	'EUG	ANM	OR	LANE
EUGENE	HELIPORT	'OG32	ANM	OR	LANE
EUGENE	HELIPORT	'OR69	ANM	OR	LANE
FIELDS	AIRPORT	'2OG4	ANM	OR	HARNEY

FIELDS	AIRPORT	'OR09	ANM	OR	HARNEY
FLORENCE	AIRPORT	'6S2	ANM	OR	LANE
FLORENCE	SEAPLANE	'100	ANM	OR	LANE
FLORENCE	HELIPORT	'OG57	ANM	OR	LANE
FOREST GR	HELIPORT	'04OG	ANM	OR	WASHINGTON
FOREST GR	HELIPORT	'50OG	ANM	OR	WASHINGTON
FRENCHGL	AIRPORT	'OR10	ANM	OR	HARNEY
GASTON	AIRPORT	'69OR	ANM	OR	YAMHILL
GASTON	AIRPORT	'70OR	ANM	OR	YAMHILL
GATES	AIRPORT	'6S4	ANM	OR	LINN
GLENDALE	AIRPORT	'OR73	ANM	OR	CURRY
GLENDALE	AIRPORT	'OG41	ANM	OR	DOUGLAS
GLENEDEN	AIRPORT	'S45	ANM	OR	LINCOLN
GLIDE	AIRPORT	'17OR	ANM	OR	DOUGLAS
GLIDE	AIRPORT	'98TE	ANM	OR	DOUGLAS
GOLD BEAC	AIRPORT	'4S1	ANM	OR	CURRY
GRANTS PA	AIRPORT	'3S8	ANM	OR	JOSEPHINE
GRANTS PA	HELIPORT	'OR88	ANM	OR	JOSEPHINE
GRANTS PA	AIRPORT	'OR74	ANM	OR	CURRY
GRESHAM	HELIPORT	'56OR	ANM	OR	MULTNOM
HAINES	AIRPORT	'OR11	ANM	OR	BAKER
HAINES	AIRPORT	'OG27	ANM	OR	BAKER
HALFWAY	AIRPORT	'OR70	ANM	OR	BAKER
HALSEY	AIRPORT	'OG16	ANM	OR	LINN
HAPPY VAL	AIRPORT	'OL03	ANM	OR	CLACKAMA
HARPER	AIRPORT	'OG50	ANM	OR	MALHEUR
HARRISBUR	AIRPORT	'OR78	ANM	OR	LINN
HARRISBUR	AIRPORT	'OR79	ANM	OR	LINN
HERMISTO	HELIPORT	'OG09	ANM	OR	UMATILLA
HERMISTO	AIRPORT	'HRI	ANM	OR	UMATILLA
HILLSBORO	AIRPORT	'OR81	ANM	OR	WASHINGTON
HILLSBORO	AIRPORT	'OR31	ANM	OR	WASHINGTON
HILLSBORO	AIRPORT	'7S3	ANM	OR	WASHINGTON
HILLSBORO	HELIPORT	'OG46	ANM	OR	WASHINGTON
HOMESTEAD	HELIPORT	'OR91	ANM	OR	BAKER
HOMESTEAD	AIRPORT	'OR12	ANM	OR	BAKER
HOOD RIVE	AIRPORT	'7OR6	ANM	OR	HOOD RIVE
HOOD RIVE	HELIPORT	'OR43	ANM	OR	HOOD RIVE
HOOD RIVE	AIRPORT	'4S2	ANM	OR	HOOD RIVE
HUBBARD	AIRPORT	'7S9	ANM	OR	CLACKAMA
IMNAHA	AIRPORT	'25U	ANM	OR	WALLOWA
INDEPENDI	AIRPORT	'OR77	ANM	OR	POLK
INDEPENDI	AIRPORT	'7S5	ANM	OR	POLK
IRONSIDE	AIRPORT	'2OR6	ANM	OR	MALHEUR
JEFFERSON	AIRPORT	'21OG	ANM	OR	MARION
JEFFERSON	AIRPORT	'2OR3	ANM	OR	MARION
JEFFERSON	AIRPORT	'OR86	ANM	OR	MARION

JOHN DAY	AIRPORT	'GCD	ANM	OR	GRANT
JORDAN VA	AIRPORT	'12OR	ANM	OR	MALHEUR
JOSEPH	AIRPORT	'JSY	ANM	OR	WALLOWA
JUNCTION	AIRPORT	'OG36	ANM	OR	LANE
JUNCTION	AIRPORT	'OR47	ANM	OR	LANE
JUNTURA	AIRPORT	'OR14	ANM	OR	MALHEUR
JUNTURA	AIRPORT	'3OR9	ANM	OR	MALHEUR
KIMBERLY	AIRPORT	'OG39	ANM	OR	WHEELER
KINZUA	AIRPORT	'OR89	ANM	OR	WHEELER
KLAMATH	AIRPORT	'3OG3	ANM	OR	KLAMATH
KLAMATH	AIRPORT	'LMT	ANM	OR	KLAMATH
KLAMATH	HELIPORT	'9OR3	ANM	OR	KLAMATH
KLAMATH	AIRPORT	'6OG3	ANM	OR	KLAMATH
LA GRANDE	AIRPORT	'LGD	ANM	OR	UNION
LAFAYETTE	AIRPORT	'OR90	ANM	OR	YAMHILL
LAKE OSW	SEAPLANE	'2OG3	ANM	OR	CLACKAMA
LAKESIDE	AIRPORT	'9S3	ANM	OR	COOS
LAKEVIEW	AIRPORT	'OR26	ANM	OR	LAKE
LAKEVIEW	AIRPORT	'LKV	ANM	OR	LAKE
LAKEVIEW	HELIPORT	'90OR	ANM	OR	LAKE
LAKEVIEW	AIRPORT	'22OG	ANM	OR	LAKE
LEBANON	HELIPORT	'8OR1	ANM	OR	LINN
LEBANON	AIRPORT	'S30	ANM	OR	LINN
LEBANON	AIRPORT	'OG10	ANM	OR	LINN
LEBANON	AIRPORT	'88OR	ANM	OR	LINN
LEXINGTON	AIRPORT	'9S9	ANM	OR	MORROW
LINCOLN C	HELIPORT	'OR93	ANM	OR	LINCOLN
LONG CREE	AIRPORT	'OR07	ANM	OR	GRANT
MADRAS	AIRPORT	'OG19	ANM	OR	JEFFERSON
MADRAS	AIRPORT	'S33	ANM	OR	JEFFERSON
MADRAS	HELIPORT	'OG35	ANM	OR	JEFFERSON
MADRAS	AIRPORT	'72OR	ANM	OR	JEFFERSON
MADRAS	AIRPORT	'OG51	ANM	OR	JEFFERSON
MALIN	AIRPORT	'4S7	ANM	OR	KLAMATH
MANZANIT	AIRPORT	'3S7	ANM	OR	TILLAMOO
MAUPIN	AIRPORT	'19OR	ANM	OR	WASCO
MC COY	AIRPORT	'OR95	ANM	OR	POLK
MC DERM	AIRPORT	'26U	ANM	OR	MALHEUR
MC KENZIE	AIRPORT	'00S	ANM	OR	LANE
MC MINNV	AIRPORT	'MMV	ANM	OR	YAMHILL
MCMINNV	HELIPORT	'OG38	ANM	OR	YAMHILL
MEDFORD	AIRPORT	'OR96	ANM	OR	JACKSON
MEDFORD	AIRPORT	'OR97	ANM	OR	JACKSON
MEDFORD	HELIPORT	'0OR0	ANM	OR	JACKSON
MEDFORD	AIRPORT	'MFR	ANM	OR	JACKSON
MEDFORD	HELIPORT	'OR99	ANM	OR	JACKSON
MEDFORD	AIRPORT	'OR06	ANM	OR	JACKSON

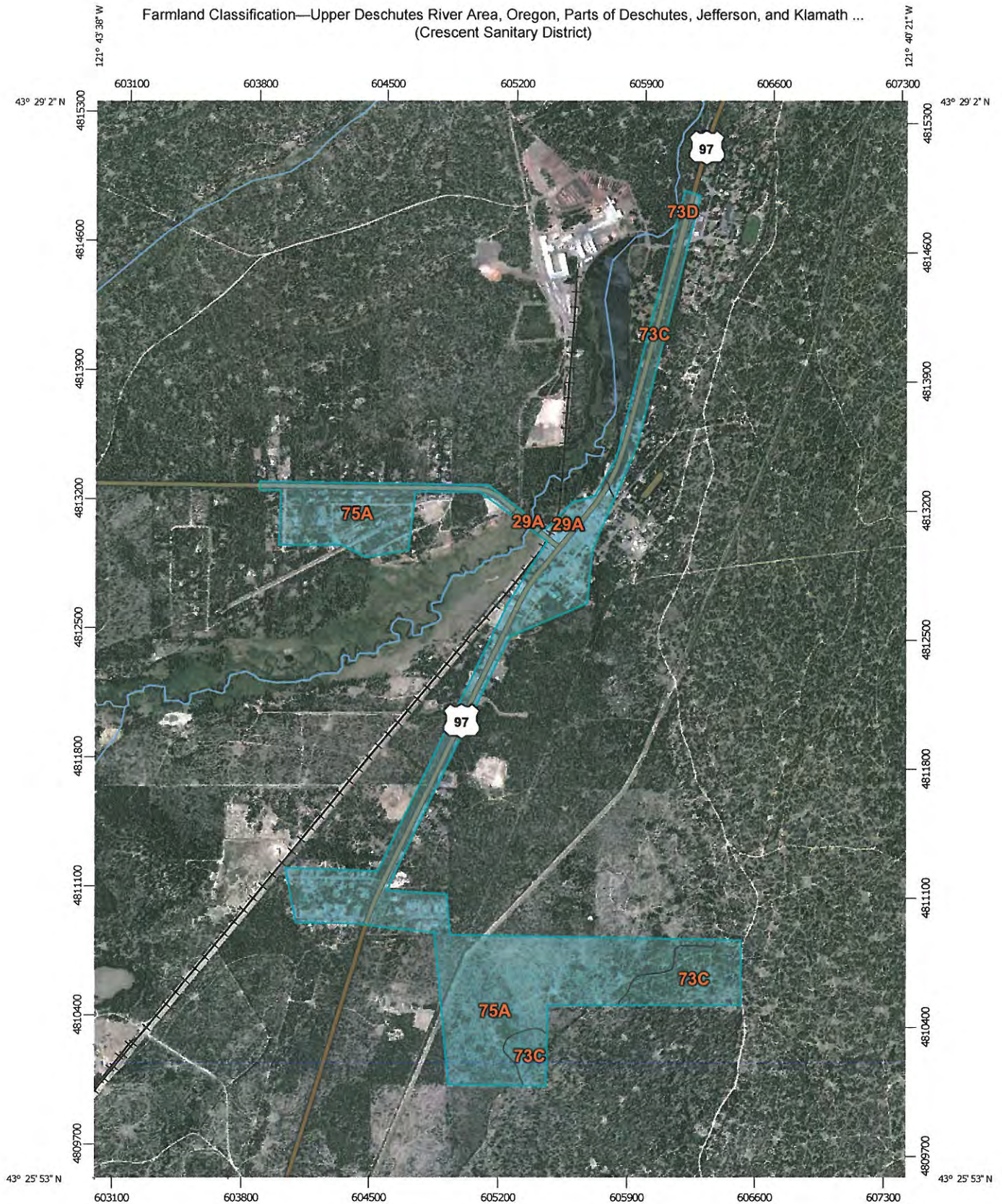
MERLIN	HELIPORT	'00R2	ANM	OR	JOSEPHINE
MERRILL	AIRPORT	'00R3	ANM	OR	KLAMATH
METOLIUS	HELIPORT	'00R4	ANM	OR	JEFFERSON
MILTON/FF	AIRPORT	'90R4	ANM	OR	UMATILLA
MILTON/FF	AIRPORT	'0G33	ANM	OR	UMATILLA
MITCHELL	AIRPORT	'64OG	ANM	OR	WHEELER
MITCHELL	AIRPORT	'04OR	ANM	OR	WHEELER
MOLALLA	HELIPORT	'50R1	ANM	OR	CLACKAMA
MOLALLA	AIRPORT	'0L05	ANM	OR	CLACKAMA
MONMOUTH	AIRPORT	'0G52	ANM	OR	POLK
MONMOUTH	AIRPORT	'00R7	ANM	OR	POLK
MONUMENT	AIRPORT	'12S	ANM	OR	GRANT
MOUNT HO	AIRPORT	'00R9	ANM	OR	HOOD RIVE
MYRTLE CR	AIRPORT	'16S	ANM	OR	DOUGLAS
MYRTLE CR	HELIPORT	'0G62	ANM	OR	DOUGLAS
NEWBERG	AIRPORT	'17S	ANM	OR	YAMHILL
NEWBERG	HELIPORT	'10R1	ANM	OR	WASHINGTON
NEWBERG	AIRPORT	'28OR	ANM	OR	YAMHILL
NEWBERG	HELIPORT	'0G55	ANM	OR	YAMHILL
NEWBERG	AIRPORT	'73OR	ANM	OR	YAMHILL
NEWBERG	AIRPORT	'256	ANM	OR	YAMHILL
NEWBERG	AIRPORT	'74OR	ANM	OR	YAMHILL
NEWPORT	AIRPORT	'ONP	ANM	OR	LINCOLN
NEWPORT	HELIPORT	'80R9	ANM	OR	LINCOLN
NORTH BEI	HELIPORT	'10R2	ANM	OR	COOS
NORTH BEI	AIRPORT	'0TH	ANM	OR	COOS
NORTH BEI	AIRPORT	'10R0	ANM	OR	COOS
NORTH PLA	AIRPORT	'0G63	ANM	OR	WASHINGTON
NORTH PLA	GLIDERPO	'10R4	ANM	OR	WASHINGTON
NORTH PLA	AIRPORT	'10R3	ANM	OR	WASHINGTON
NYSSA	AIRPORT	'97OG	ANM	OR	MALHEUR
OAKLAND	AIRPORT	'20R4	ANM	OR	DOUGLAS
OAKLAND	AIRPORT	'60OR	ANM	OR	DOUGLAS
OAKRIDGE	AIRPORT	'13OR	ANM	OR	LANE
OAKRIDGE	AIRPORT	'550	ANM	OR	LANE
ONTARIO	HELIPORT	'50R6	ANM	OR	MALHEUR
ONTARIO	AIRPORT	'ONO	ANM	OR	MALHEUR
OREGON C	AIRPORT	'0G30	ANM	OR	CLACKAMA
OREGON C	AIRPORT	'0G20	ANM	OR	CLACKAMA
OREGON C	AIRPORT	'20R0	ANM	OR	CLACKAMA
OREGON C	AIRPORT	'70R9	ANM	OR	CLACKAMA
OREGON C	HELIPORT	'10R9	ANM	OR	CLACKAMA
OREGON C	AIRPORT	'10R7	ANM	OR	CLACKAMA
OWYHEE	AIRPORT	'28U	ANM	OR	MALHEUR
OWBOW VI	HELIPORT	'OR83	ANM	OR	BAKER
PACIFIC CIT	AIRPORT	'PFC	ANM	OR	TILLAMOO
PAISLEY	AIRPORT	'22S	ANM	OR	LAKE

PENDLETO	HELIPORT	'46OR	ANM	OR	UMATILLA
PENDLETO	AIRPORT	'PDT	ANM	OR	UMATILLA
PENDLETO	AIRPORT	'OG42	ANM	OR	UMATILLA
PENDLETO	HELIPORT	'40OR	ANM	OR	UMATILLA
PILOT ROCK	AIRPORT	'45OG	ANM	OR	UMATILLA
PINEHURST	AIRPORT	'24S	ANM	OR	JACKSON
PORTLAND	HELIPORT	'7OR5	ANM	OR	MULTNOM
PORTLAND	HELIPORT	'3OR3	ANM	OR	MULTNOM
PORTLAND	HELIPORT	'21OR	ANM	OR	MULTNOM
PORTLAND	HELIPORT	'9OR6	ANM	OR	MULTNOM
PORTLAND	HELIPORT	'3OR0	ANM	OR	MULTNOM
PORTLAND	HELIPORT	'9OR5	ANM	OR	MULTNOM
PORTLAND	HELIPORT	'61J	ANM	OR	MULTNOM
PORTLAND	AIRPORT	'PDX	ANM	OR	MULTNOM
PORTLAND	AIRPORT	'HIO	ANM	OR	WASHINGTON
PORTLAND	AIRPORT	'TTD	ANM	OR	MULTNOM
PORTLAND	HELIPORT	'34OR	ANM	OR	MULTNOM
PORTLAND	HELIPORT	'OG11	ANM	OR	MULTNOM
PORTLAND	HELIPORT	'2OR9	ANM	OR	MULTNOM
PORTLAND	AIRPORT	'4S9	ANM	OR	CLACKAMAS
POST	AIRPORT	'42OR	ANM	OR	CROOK
POWELL BUTTE	HELIPORT	'93OG	ANM	OR	CROOK
POWERS	AIRPORT	'6S6	ANM	OR	COOS
PRAIRIE CITY	AIRPORT	'97OR	ANM	OR	GRANT
PRAIRIE CITY	AIRPORT	'OR17	ANM	OR	GRANT
PRINEVILLE	HELIPORT	'77OR	ANM	OR	CROOK
PRINEVILLE	AIRPORT	'OG21	ANM	OR	CROOK
PRINEVILLE	HELIPORT	'2OR2	ANM	OR	CROOK
PRINEVILLE	AIRPORT	'S39	ANM	OR	CROOK
PRINEVILLE	AIRPORT	'6OR4	ANM	OR	CROOK
PROSPECT	AIRPORT	'64S	ANM	OR	JACKSON
REDLAND	AIRPORT	'20OR	ANM	OR	CLACKAMAS
REDMOND	HELIPORT	'62OR	ANM	OR	DESCHUTES
REDMOND	AIRPORT	'3OR8	ANM	OR	DESCHUTES
REDMOND	AIRPORT	'OR02	ANM	OR	CROOK
REDMOND	AIRPORT	'RDM	ANM	OR	DESCHUTES
REEDSPORT	HELIPORT	'79OR	ANM	OR	DOUGLAS
ROGUE RIVER	AIRPORT	'4OR0	ANM	OR	JACKSON
ROME	AIRPORT	'0OR6	ANM	OR	MALHEUR
ROME	AIRPORT	'REO	ANM	OR	MALHEUR
ROSEBURG	AIRPORT	'95OR	ANM	OR	DOUGLAS
ROSEBURG	AIRPORT	'5S1	ANM	OR	DOUGLAS
ROSEBURG	AIRPORT	'48OR	ANM	OR	DOUGLAS
ROSEBURG	HELIPORT	'1OG1	ANM	OR	DOUGLAS
ROSEBURG	AIRPORT	'OG40	ANM	OR	DOUGLAS
ROSEBURG	AIRPORT	'RBG	ANM	OR	DOUGLAS
ROSEBURG	AIRPORT	'58OR	ANM	OR	DOUGLAS

RUCH	AIRPORT	'OG13	ANM	OR	JACKSON
SALEM	AIRPORT	'OR87	ANM	OR	MARION
SALEM	HELIPORT	'3OR5	ANM	OR	MARION
SALEM	AIRPORT	'4OR5	ANM	OR	MARION
SALEM	AIRPORT	'4OR7	ANM	OR	MARION
SALEM	HELIPORT	'4OR1	ANM	OR	MARION
SALEM	AIRPORT	'SLE	ANM	OR	MARION
SALEM	HELIPORT	'51OR	ANM	OR	MARION
SALEM	HELIPORT	'9OR2	ANM	OR	MARION
SALEM	HELIPORT	'OG37	ANM	OR	MARION
SALEM	AIRPORT	'4OR8	ANM	OR	MARION
SANDY	AIRPORT	'S48	ANM	OR	CLACKAMA
SANDY	AIRPORT	'OG29	ANM	OR	CLACKAMA
SANDY	AIRPORT	'03S	ANM	OR	CLACKAMA
SANDY	AIRPORT	'4OR6	ANM	OR	CLACKAMA
SANTIAM J	AIRPORT	'8S3	ANM	OR	LINN
SCAPPOOS	AIRPORT	'8OR6	ANM	OR	COLUMBIA
SCAPPOOS	AIRPORT	'SPB	ANM	OR	COLUMBIA
SCIO	AIRPORT	'OR51	ANM	OR	LINN
SCIO	HELIPORT	'25OR	ANM	OR	LINN
SCIO	AIRPORT	'OG28	ANM	OR	LINN
SEASIDE	HELIPORT	'OR63	ANM	OR	CLATSOP
SEASIDE	AIRPORT	'56S	ANM	OR	CLATSOP
SELMA	AIRPORT	'84OR	ANM	OR	JOSEPHINE
SELMA	AIRPORT	'5OR0	ANM	OR	JOSEPHINE
SENECA	AIRPORT	'71OR	ANM	OR	GRANT
SENECA	AIRPORT	'7OR8	ANM	OR	GRANT
SENECA	AIRPORT	'OG14	ANM	OR	GRANT
SENECA	AIRPORT	'OR98	ANM	OR	GRANT
SHADY CO	AIRPORT	'OG31	ANM	OR	JACKSON
SHANIKO	AIRPORT	'OG54	ANM	OR	WASCO
SHANIKO	AIRPORT	'9OR1	ANM	OR	WASCO
SHERIDAN	AIRPORT	'91OR	ANM	OR	YAMHILL
SHERIDAN	AIRPORT	'98OR	ANM	OR	YAMHILL
SHERIDAN	AIRPORT	'67OG	ANM	OR	POLK
SHERIDAN	AIRPORT	'OG23	ANM	OR	YAMHILL
SILETZ	AIRPORT	'5OR3	ANM	OR	LINCOLN
SILVER LAK	AIRPORT	'1JY2	ANM	OR	LAKE
SILVER LAK	AIRPORT	'08OR	ANM	OR	LAKE
SILVER LAK	AIRPORT	'45S	ANM	OR	LAKE
SILVERTON	AIRPORT	'22OR	ANM	OR	MARION
SISTERS	AIRPORT	'7OR4	ANM	OR	DESCHUTE
SISTERS	AIRPORT	'OG15	ANM	OR	DESCHUTE
SISTERS	AIRPORT	'6K5	ANM	OR	DESCHUTE
SISTERS	AIRPORT	'61OR	ANM	OR	DESCHUTE
SISTERS	AIRPORT	'OR34	ANM	OR	DESCHUTE
SIXES	AIRPORT	'5S6	ANM	OR	CURRY

SPRAGUE F	AIRPORT	'5OR4	ANM	OR	KLAMATH
SPRINGFIE	HELIPORT	'41OR	ANM	OR	LANE
SPRINGFIE	HELIPORT	'OG64	ANM	OR	LANE
SPRINGFIE	HELIPORT	'23OR	ANM	OR	LANE
SPRINGFIE	AIRPORT	'36OR	ANM	OR	LANE
STARKEY	AIRPORT	'37OR	ANM	OR	UNION
STAYTON	AIRPORT	'5OR8	ANM	OR	MARION
STAYTON	AIRPORT	'56OG	ANM	OR	LINN
STAYTON	AIRPORT	'8OR2	ANM	OR	LINN
STAYTON	AIRPORT	'5OR9	ANM	OR	LINN
STAYTON	HELIPORT	'5OR7	ANM	OR	MARION
SUNRIVER	AIRPORT	'S21	ANM	OR	DESCHUTE
SUTHERLIN	AIRPORT	'OG24	ANM	OR	DOUGLAS
TANGENT	AIRPORT	'6OR0	ANM	OR	LINN
THE DALLE	AIRPORT	'6OR2	ANM	OR	WASCO
THE DALLE	AIRPORT	'DLS	ANM	OR	LANE
THE DALLE	HELIPORT	'09OR	ANM	OR	WASCO
THE DALLE	AIRPORT	'6OR1	ANM	OR	WASCO
TIGARD	HELIPORT	'OR37	ANM	OR	WASHINGTON
TIGARD	AIRPORT	'OG34	ANM	OR	WASHINGTON
TILLAMOO	AIRPORT	'TMK	ANM	OR	TILLAMOO
TILLAMOO	HELIPORT	'6OR3	ANM	OR	TILLAMOO
TOLEDO	AIRPORT	'5S4	ANM	OR	LINCOLN
TROY	AIRPORT	'03OR	ANM	OR	WALLOWA
TUALATIN	HELIPORT	'6OR5	ANM	OR	CLACKAMA
UKIAH	AIRPORT	'96OR	ANM	OR	UMATILLA
UMATILLA	HELIPORT	'59OR	ANM	OR	UMATILLA
UNION	AIRPORT	'OR03	ANM	OR	UNION
VALE	AIRPORT	'S49	ANM	OR	MALHEUR
VERNONIA	AIRPORT	'30OR	ANM	OR	COLUMBIA
VERNONIA	AIRPORT	'05S	ANM	OR	COLUMBIA
WALDPOR	AIRPORT	'R33	ANM	OR	LINCOLN
WALLOWA	AIRPORT	'99OR	ANM	OR	WALLOWA
WAMIC	AIRPORT	'32OR	ANM	OR	WASCO
WAPINITIA	AIRPORT	'OR53	ANM	OR	WASCO
WARRENTON	HELIPORT	'15OR	ANM	OR	CLATSOP
WASCO	AIRPORT	'35S	ANM	OR	SHERMAN
WEST LINN	HELIPORT	'92OR	ANM	OR	CLACKAMA
WHITE CITY	HELIPORT	'39OR	ANM	OR	JACKSON
WHITE CITY	AIRPORT	'OG25	ANM	OR	JACKSON
WHITE CITY	AIRPORT	'0OR8	ANM	OR	JACKSON
WILLAMIN	AIRPORT	'2OG5	ANM	OR	YAMHILL
WONDER	AIRPORT	'6OR6	ANM	OR	JOSEPHINE
YAMHILL	AIRPORT	'OR05	ANM	OR	YAMHILL
YAMHILL	AIRPORT	'OR59	ANM	OR	YAMHILL

Farmland Classification—Upper Deschutes River Area, Oregon, Parts of Deschutes, Jefferson, and Klamath ...
(Crescent Sanitary District)



Map Scale: 1:28,400 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84



Farmland Classification

Farmland Classification— Summary by Map Unit — Upper Deschutes River Area, Oregon, Parts of Deschutes, Jefferson, and Klamath Counties (OR620)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
29A	Cryaquolls, 0 to 3 percent slopes	Farmland of statewide importance	2.3	0.5%
73C	Lapine gravelly loamy coarse sand, 0 to 15 percent slopes	Farmland of statewide importance	92.4	19.7%
73D	Lapine gravelly loamy coarse sand, 15 to 30 percent slopes	Farmland of statewide importance	0.3	0.1%
75A	Lapine gravelly loamy coarse sand, low, 0 to 3 percent slopes	Farmland of statewide importance	374.1	79.8%
Totals for Area of Interest			469.1	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Nonirrigated Capability Class

Nonirrigated Capability Class— Summary by Map Unit — Upper Deschutes River Area, Oregon, Parts of Deschutes, Jefferson, and Klamath Counties (OR620)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
29A	Cryaquolls, 0 to 3 percent slopes	5	2.3	0.5%
73C	Lapine gravelly loamy coarse sand, 0 to 15 percent slopes	6	92.4	19.7%
73D	Lapine gravelly loamy coarse sand, 15 to 30 percent slopes	6	0.3	0.1%
75A	Lapine gravelly loamy coarse sand, low, 0 to 3 percent slopes	6	374.1	79.8%
Totals for Area of Interest			469.1	100.0%

Description

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit. Only class and subclass are included in this data set.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

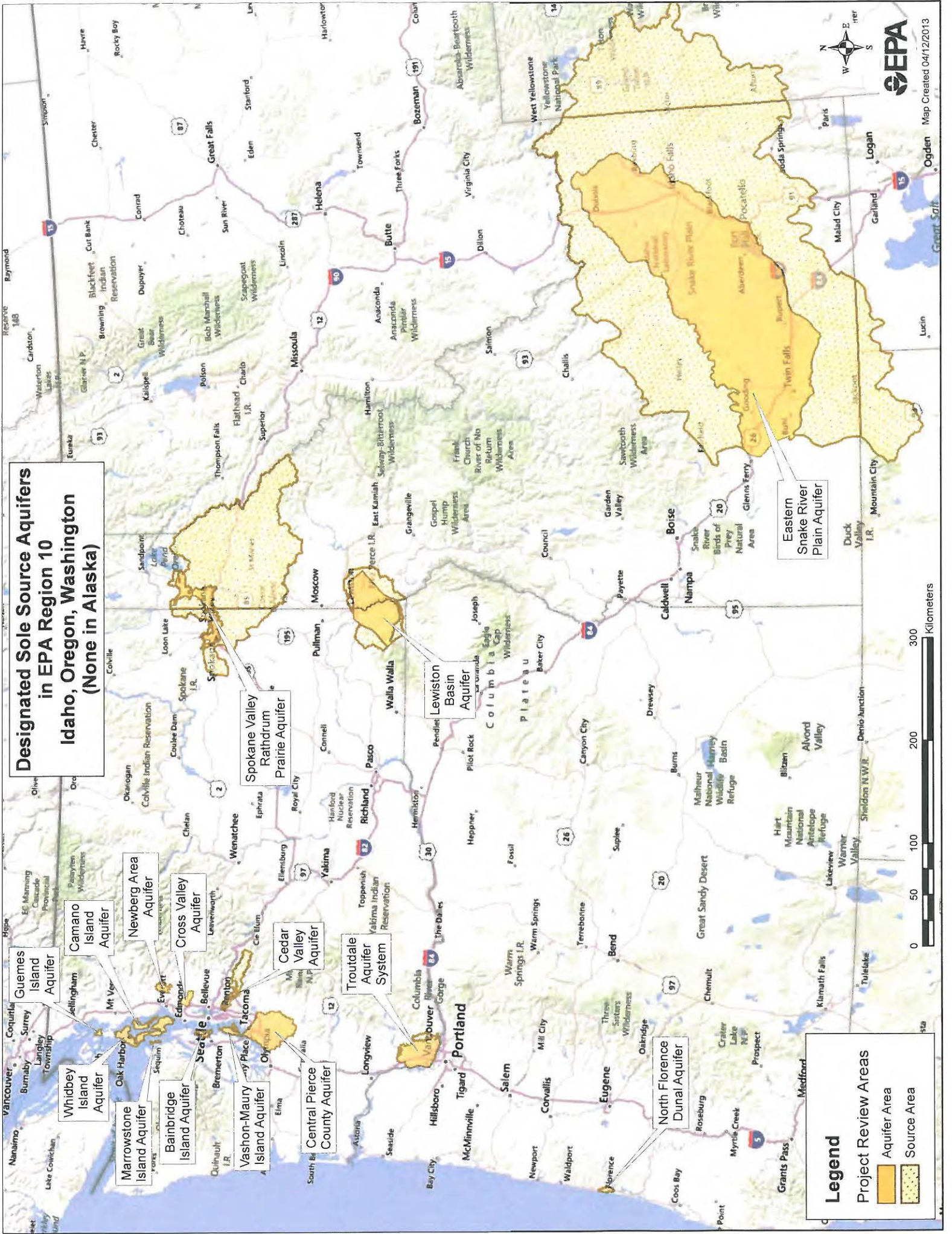
Rating Options

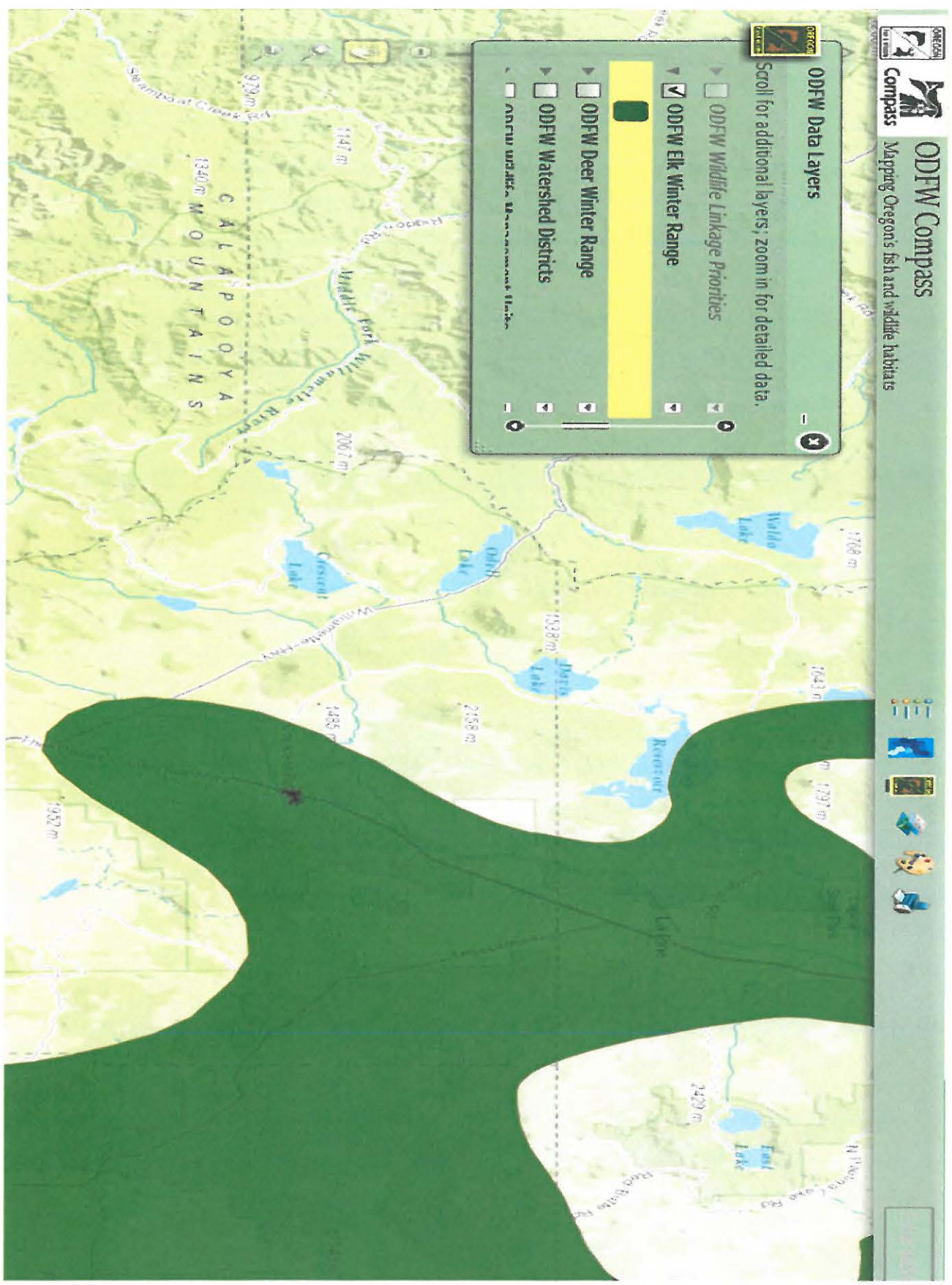
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Designated Sole Source Aquifers in EPA Region 10 Idaho, Oregon, Washington (None in Alaska)





crescent conservation opportunity area

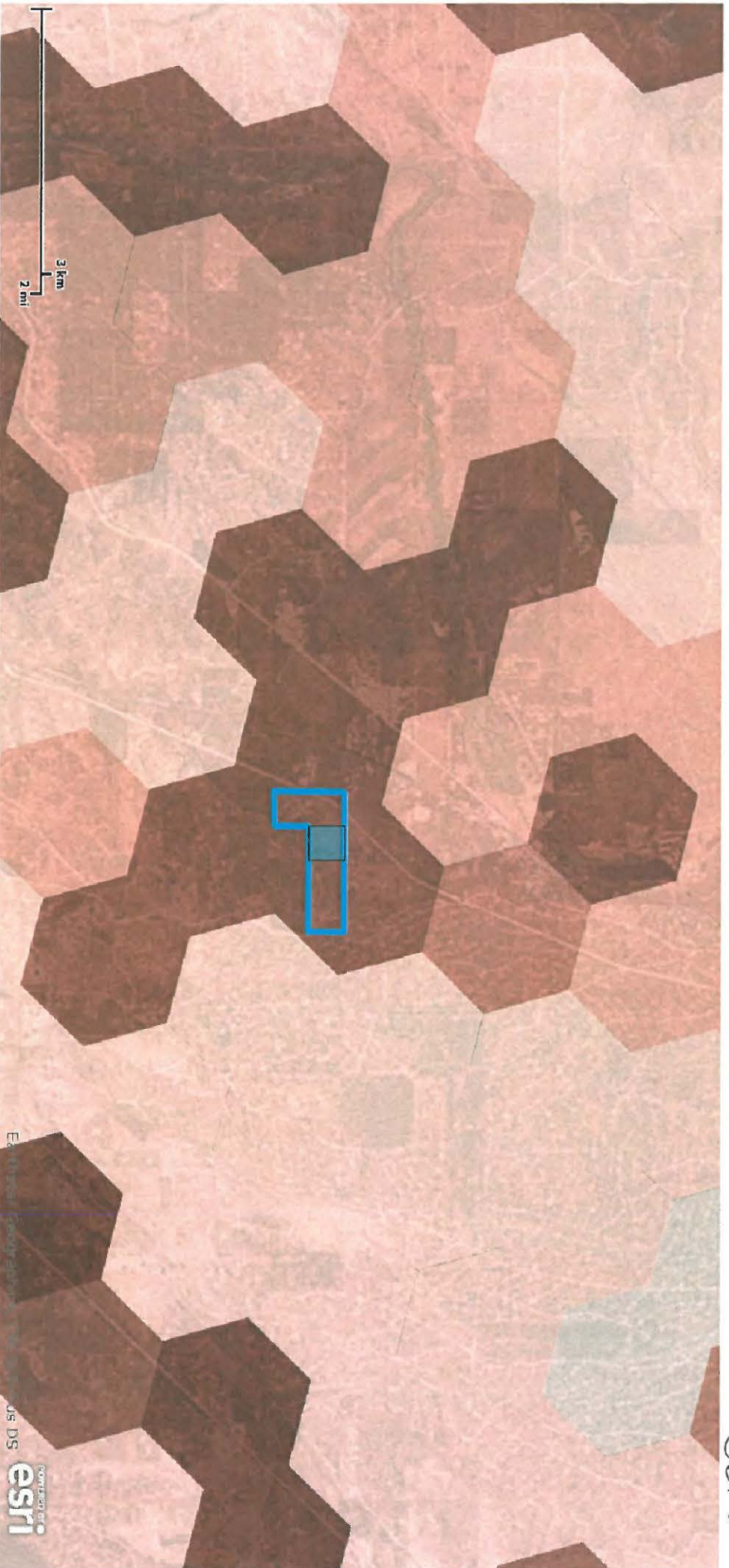
ODFW



Mon Dec 14 2015 09:40:42 AM.

crescent terrestrial spp of concern

ODFW



Designation #2

Hexagon ID's 623667
622161
622160



Oregon Department of Fish and Wildlife



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Terrestrial Species of Concern

Definition: Prioritizes areas based on species of state and/or national conservation importance, including those vulnerable to extinction or those undergoing regional decline or other species requiring special management attention. Emphasis placed on high priority species such as Federal or State Threatened or Endangered, candidate species for listing status; and Oregon Conservation Strategy species.

Aggregation method: An ODFW created prioritization rule-set was developed to prioritize areas based on results found within data sources. High priority values are dependent upon documented observations of high priority species or ODFW Sage-Grouse Core Areas. Lower priorities were established from overlaying modeling data. Additional details:

- Observation data were filtered to not include any observation prior to 1975, and observations do not include fish species (which are accounted for within the Aquatic Species of Concern layer.)
- Oregon Conservation Strategy (OCS) GAP Overlay values were calculated by overlaying all available terrestrial vertebrate OCS species distribution models analyzed within the USGS GAP Distribution Models project. The OCS GAP Overlay Value simply corresponds to the number of models that are found to be within a given area.
- More information on the [Oregon Conservation Strategy](#), including a list of strategy species. Many of these species are also designated as state sensitive species.
- Federal or State status and species lists used in this analysis can be found on the [Oregon Biodiversity Information Center](#) website.

Priority Rank Definitions

Priority 1: At least one of the following has been documented in this area:

- Documented observation of a Federal Threatened or Endangered species (including Candidate species)
- Documented observation of a State Threatened or Endangered species
- Documented observation of an Oregon Conservation Strategy species (observed within the listed eco-region) that also holds a NatureServe state rank of "S1" (critically imperiled within the state of Oregon)
- Oregon Department of Fish and Wildlife (ODFW) Sage-Grouse Core Area

Priority 2: At least one of the following has been documented in this area (and no species documented from the Priority 1 list):

- Documented observation of any Oregon Conservation Strategy species (observed within the listed eco-region) that holds a lower NatureServe state rank than "S1" (critically imperiled within the state of Oregon)
- Documented observation of a Federal Species of Concern
- ODFW Sage-Grouse Low-Density Area

Priority 3: At least one of the following has been documented in this area (and no species documented from Priority 1 or 2 lists):

- Species with a NatureServe state rank of "S1" (critically imperiled within the state of Oregon)
- Species with a NatureServe state rank of "S2" (imperiled within the state of Oregon)
- Additional state priority species: species protected under the Bald and Golden Eagle Protection Act (Bald Eagles, Golden Eagles); all bat species; American Pika

Priority 4: At least one of the following has been documented in this area (and no species documented within Terrestrial Species of Concern Priority 1, 2, or 3 lists):

- Species with a NatureServe state rank of "S3" (rare, uncommon, or threatened but not immediately imperiled)
- Highest class of Terrestrial Vertebrate OCS GAP Overlay Values: 48-33 species distribution models

Priority 5: No species documented within Terrestrial Species of Concern Priority 1, 2, 3, or 4 lists. Contains second highest class of Terrestrial Vertebrate OCS GAP Overlay Values: 32-27 species distribution models.

Priority 6: No species documented within Terrestrial Species of Concern Priority 1, 2, 3, 4, or 5 lists. Contains lowest class of Terrestrial Vertebrate OCS GAP Overlay Values: 26-5 species distribution models.

Input Layer Definitions

Species Priority Rank: Designates the priority rank established from a documented species observation. Definitions for values 1 through 4 can be found in the Terrestrial Species of Concern priority rank definitions. Value 9999 indicates that as of the last data update, no observations of a species of concern have been recorded.

ODFW Sage-Grouse Core Areas: Designates that an ODFW Sage-Grouse Core Area has been documented. A value of 1 indicates documentation of an ODFW Sage-Grouse Core Area. A value of 2 indicates documentation of an ODFW Sage-Grouse Low Density Area. A value of 9999 indicates no Sage-Grouse Core Area has been determined in this hexagon.

See the [Greater Sage-Grouse Conservation Assessment and Strategy for Oregon](#).

OCS Gap Species Distribution Models: Provides the results of the Oregon Conservation Strategy (OCS) GAP Overlay analysis, which was calculated by overlaying all available terrestrial vertebrate OCS species distribution models analyzed within the USGS GAP Distribution Models project. The value presented here corresponds to the number of models that are found to be within a given area.

Data Source

Dataset Name	Dataset Description	Data Steward
GAP Distribution Models	Vertebrate distribution models for amphibians, birds, mammals, and reptiles occurring in the U.S.	USGS GAP
ODFW Sage-Grouse Core Areas	The Sage-Grouse Core Area maps and data were developed as one component of the ODFW Conservation Strategy for sage-grouse in Oregon.	ODFW
Bald Eagle Breeding Surveys in Oregon	Bald Eagle nests and breeding outcomes monitored within Oregon and along the Lower Columbia River from 1971 to 2010.	US Fish and Wildlife Service and Oregon Eagle Foundation
Golden Eagle Breeding Surveys in Oregon	Summary of Golden Eagle observations throughout the state of Oregon. Observations have been compiled from records between 2011 and 2012. These records were compiled from a wide range of sources over a 2 year timespan and are by no means complete. The breeding area records here do not necessarily represent nest locations.	US Fish and Wildlife Service and Oregon Eagle Foundation
ODFW Herptile Observations	Monitoring of amphibians was conducted in coordination with ODFW aquatic habitat and fish surveys. Observations and captures occurred between 2007 and 2010, and the data is reported as presence only.	ODFW
ODFW Scientific Take Permit Reports	Reports provided to ODFW from approved applicants within the ODFW Scientific Take Permit Program. All applicants must submit a report providing locations of species observations or contact. These reports are then compiled into a single database, and provide a good source for additional wildlife observation data.	ODFW
ODFW Washington Ground Squirrel Observations	This data set is a compilation of several sources depicting Washington Ground Squirrel activity, which includes formal surveys of burrow locations from ODFW and private contractors, general centerpoints for colonies, and incidental sightings. Dates of locations observed range from 1979 to January, 2013, and may have been monitored once or several times over this time period.	ODFW
ORBIC Point Observation Dataset	Wildlife observation points for more common wildlife and plant species throughout Oregon, compiled from various state agencies and other sources.	ORBIC
Oregon Biodiversity Information Center	State-wide, documented and confirmed element occurrences of sensitive wildlife and	ORBIC


(ORBIC) Element Occurrences	plant species, includes range and distribution for each entry.	
Oregon Turtle Survey Data	Turtle observations and mark and recapture studies monitored in Oregon, compiled from a variety of sources and maintained by Oregon Department of Fish and Wildlife (ODFW). Observation dates range from 1979 to January, 2013, and areas may have been monitored once or several times over this time period.	ODFW
Peregrine Falcon Breeding Surveys in Oregon	Peregrine Falcon nests and breeding outcomes monitored in Oregon from 2003 to 2010.	USFWS and Oregon State University
US Forrest Service (USFS) Bat Grid Observations	Database encompassing bat observations and surveys throughout the state of Oregon. Data was exported from database in October, 2013.	USFS

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Compiled Crucial Habitat

Definition: The Western Governor's Wildlife Council defines "crucial habitat" as places containing the resources (including food, water, cover, shelter and important wildlife corridors) that are necessary for the survival and reproduction of aquatic and terrestrial wildlife and to prevent unacceptable declines, or facilitate future recovery of, wildlife populations; or are important ecological systems with high biological diversity value. The Compiled Crucial Habitat layer can be used to determine areas containing high priority crucial habitat results throughout this analysis. This layer is a result of aggregating all crucial habitat input layers, and can provide an initial overview of whether an area contains crucial habitat or important natural resources for fish and wildlife.

Aggregation method: The Compiled Crucial Habitat layer displays the results of aggregating the Terrestrial Crucial Habitat and Aquatic Crucial Habitat layers. Crucial Habitat results will indicate the highest priority (or most crucial) result of the two crucial habitat aggregation layers. Any "No Data/Null" areas within the Aquatic Crucial Habitat layer are assessed the results from the Terrestrial Crucial Habitat data input layer.

Priority Rank Definitions

Priority 1: Either the Terrestrial Crucial Habitat or Aquatic Crucial Habitat was found to have a priority rank of 1, which indicates the most crucial habitat results within this analysis. Please see the Terrestrial Crucial Habitat or Aquatic Crucial Habitat documentation for additional details.

Priority 2: The most crucial priority rank of either the Terrestrial Crucial Habitat or Aquatic Crucial Habitat layers is 2, and neither crucial habitat input layer contained a priority level of 1. This is the second most crucial priority rank within this analysis. Please see the Terrestrial Crucial Habitat or Aquatic Crucial Habitat documentation for additional details.

Priority 3: The most crucial priority rank of either the Terrestrial Crucial Habitat or Aquatic Crucial Habitat layers is 3, and neither crucial habitat input layer contained a priority rank of 1 or 2. This is the third highest priority level within this analysis. Please see the Terrestrial Crucial Habitat or Aquatic Crucial Habitat documentation for additional details.

Priority 4: The most crucial priority rank of either the Terrestrial Crucial Habitat or Aquatic Crucial Habitat layers is 4, and neither crucial habitat input layer contained a priority rank of 1 through 3. This is the third least crucial priority rank within this analysis. Please see the Terrestrial Crucial Habitat or Aquatic Crucial Habitat documentation for additional details.

Priority 5: The most crucial priority rank of either the Terrestrial Crucial Habitat or Aquatic Crucial Habitat layers is 5, and neither crucial habitat input layer contained a priority rank of 1 through 4. This is the second least crucial rank within this analysis. Please see the Terrestrial Crucial Habitat or Aquatic Crucial Habitat documentation for additional details.

Priority 6: Both the Terrestrial Crucial Habitat Aquatic Crucial Habitat were found to have a priority rank of 6, or no data available. This is the least crucial habitat rank within this analysis. See the Terrestrial Crucial Habitat or Aquatic Crucial Habitat documentation for additional details.

Input Layer Definitions

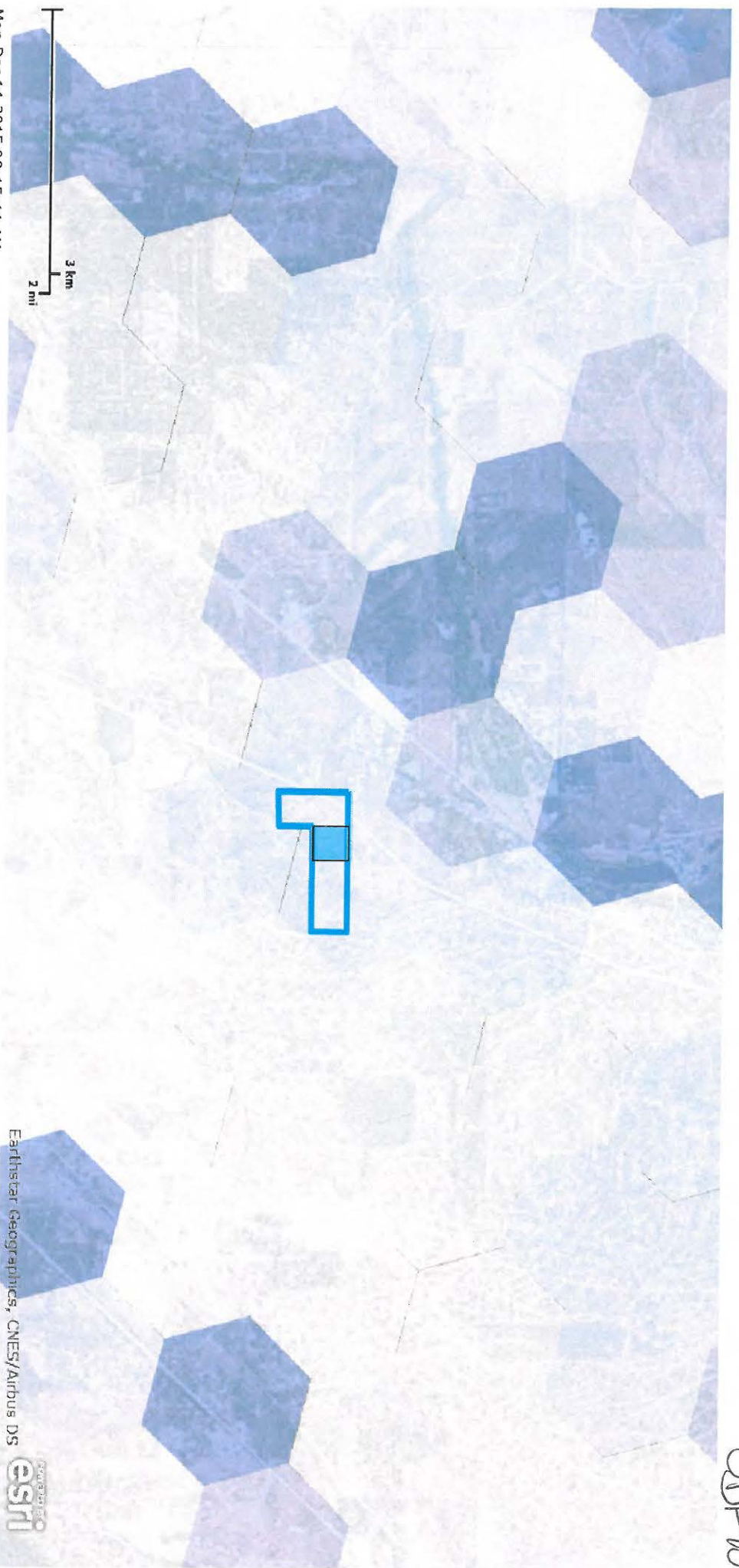
Terrestrial Crucial Habitat Rank: Prioritization of the documented areas containing important natural resources for the survival and reproduction of terrestrial wildlife species.

Aquatic Crucial Habitat Rank: Prioritization of the documented areas containing important natural resources for the survival and reproduction of aquatic fish species.

Data Sources: See crucial habitat input layers for additional details.

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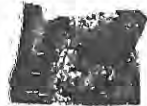
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Terrestrial Crucial Habitat

Layer definition: Prioritization of areas documented as containing priority species and/or important natural resources for the survival and reproduction of terrestrial wildlife species.

Aggregation method: A weighted-sum, additive aggregation method was used to aggregate six data input layers: Terrestrial Species of Concern, Large Natural Areas, Natural Vegetation Communities, Landscape Connectivity, Wetland and Riparian Areas, and Terrestrial Species of Economic and Recreational Importance. As displayed in the table below, each priority rank within each crucial habitat data input layer was assigned a weight, which were distributed exponentially from 0 through 20. Weights were assigned by ODFW based on the importance of the natural resource prioritized in each layer, as well as the type of data used and confidence in said data. The weight of each data input layer priority rank were summed within a given area, and the total scores resulted in a range of 2-75. These scores were classified into the six priority ranks using a quantile classification method, which aims to divide each class into an equal number of hexagons.

Crucial Habitat Input Layer	Assigned Weights						
	20	10	5	3	2	1	0
Terrestrial Species of Concern Priority Rank	1	2	3		4	5, 6	
Terrestrial Species of Economic and Recreational Importance Rank		1	2	3	4	5, 6	
Large Natural Areas Rank		1	2	3			6
Landscape Corridors Rank		1		2			3, 6
Natural Vegetation Communities Rank		1	2	3			6
Wetland and Riparian Areas Rank		1, 2	3	4	5		6

Conservation Opportunity Areas		Contains Conservation Opportunity Area				Does not contain Conservation Opportunity Area
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Priority Rank Definitions

Priority 1: Areas with a very high additive Terrestrial Crucial Habitat score (75 - 37). These areas often are an indicator of a Terrestrial Species of Concern priority rank of 1.

Priority 2: Areas with the next highest range of the additive Terrestrial Crucial Habitat score (36 - 30). About half of these areas include a Terrestrial Species of Concern priority rank of 1. The other half of these areas are the result of a combination of high priority rank values from multiple terrestrial crucial habitat data input layers.

Priority 3: Areas with a high to moderate range of the additive Terrestrial Crucial Habitat score (29 - 24). Small percentages (about 10%) of these areas contain a Terrestrial Species of Concern priority rank of 1. The large majority of these areas contain high-moderate priority rank values for multiple terrestrial crucial habitat data input layers.

Priority 4: Areas with a moderate range of the additive Terrestrial Crucial Habitat score (23 - 18). With the exception of the Terrestrial Species of Economic and Recreational Importance data input layer, very few hexagons in this class contain any terrestrial crucial habitat data input layers with a priority rank of 1. A small amount of hexagons within this class contain a Terrestrial Species of Concern priority rank of 1.

Priority 5: Areas with a low range of the additive Terrestrial Crucial Habitat score (17 - 12). No hexagon contains a Terrestrial Species of Concern priority rank of 1. Very few hexagons contain any terrestrial crucial habitat data input layer with a priority rank of 1.

Priority 6: Areas with the lowest range of the additive Terrestrial Crucial Habitat score (11 - 2). A large majority (98%) of hexagons contain low ranks (priority rank of 4, 5, or 6) within the Terrestrial Species of Concern data input layer. The vast majority of areas in this class are the result of low priority scores for almost all terrestrial crucial habitat data input layers.

Input Layer Definitions

Terrestrial Species of Concern: Prioritizes areas based on species of state and/or national conservation importance, including those vulnerable to extinction or those undergoing regional decline or other species requiring special management attention. Emphasis placed on high priority species such as Federal or State Threatened or Endangered; candidate species for listing status; and Oregon Conservation Strategy species.

Conservation Opportunity Area: Documents whether area includes an ODFW Conservation Opportunity Area.

Wetland or Riparian Areas: Prioritizes wetland or riparian habitat areas.

Terrestrial Species of Economic or Recreational Importance: Prioritizes areas important to species of economic or recreational importance, with a focus on terrestrial game species and important wildlife viewing areas.

Natural Vegetation Community: Prioritizes areas that have been documented to include Oregon Conservation Strategy habitats.

Large Natural Area: Prioritizes large areas of contiguous habitat that are relatively intact or have low levels of anthropogenic impact.

Landscape Connectivity: Prioritizes areas documented within an assessment focusing on landscape corridors connecting core habitats of Large Natural Areas.

Data Source

Dataset Name	Dataset Description	Data Steward
<u>ODFW Conservation Opportunity Areas</u>	Conservation Opportunity Areas were developed for the Oregon Conservation Strategy to help identify priority areas for conservation actions that directly benefit wildlife and habitats. These areas are generally either areas of high biodiversity or areas with unique habitat values.	ODFW

See terrestrial crucial habitat input layers for additional data source documentation.


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