*Town of Scotia*

*Community Services District*

# Municipal Service Review

**October 13, 2010**

**Prepared for Formation of the**

**Scotia Community Services District**

# Town of Scotia

# Community Services District

# Municipal Service Review

**October 2010**

# LAFCO Membership 2010

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# Executive Summary

Town of Scotia, LLC (TOS) has submitted a tentative map with Humboldt County to subdivide the existing, privately-owned town of Scotia and filed an application for the formation of a Community Services District (CSD). The Humboldt County Local Agency Formation Commission (LAFCo) reviews proposals for the formation of new local governmental agencies and changes of organization for all local agencies within Humboldt County. The Municipal Service Review (MSR) was prepared to document service capabilities for the proposed CSD.

Very little development is feasible within the proposed boundaries due to limited available vacant land, substandard lot sizes that cannot support additions, and physical constraints. Current industrial uses are expected to remain the same. TOS currently provides the majority of public services and utilities for the town of Scotia. There are no new proposed facilities or services. The only change is the service provider, from TOS to the proposed Scotia CSD. As part of the transfer of services and utilities to a new CSD, a detailed utility description of ownership has been prepared and repairs to existing infrastructure have been identified and are summarized in Table ES-1.

**Table ES-1**

**Summary of Infrastructure Analysis**

**Scotia CSD Formation Municipal Service Review**

| Utilities and Services | Changes |
|---|---|
| Wastewater collection, treatment, and disposal | Responsibility for wastewater collection, treatment, and disposal services will be transferred to the Scotia CSD. The wastewater collection system will be improved through relocation of the residential/commercial lines to the new Scotia CSD public right-of-way, using 6-inch minimum diameter pipe; replacement of all service laterals using 4-inch minimum diameter pipe and the installation of service cleanouts; and installation of new manholes and cleanouts in residential and commercial areas.<br><br>The wastewater treatment facility will be improved through relocation of the electrical controls outside flood elevation; installation of new drives on the primary clarifier, deep well pumps, shallow well pumps, and secondary clarifier; leveling the primary weir; replacing the shallow well pumps; addition of a solids contact basin or small activated sludge basin, and an additional secondary clarifier; and installation of return activated sludge pumps and blowers. |
| Water supply, storage, treatment, and distribution | Responsibility for water supply, storage, and treatment services will be transferred to the Scotia CSD. TOS will transfer the water right license to the Scotia CSD. The water distribution service will be improved through relocation of distribution lines to the public right-of-way, installation of all new services from the new distribution lines to residences with meters, and verification of serviceability or installation of new services and meters to commercial and industrial users.<br><br>Raw and treated water storage tank foundations will be modified to meet current seismic |

**Table ES-1**

**Summary of Infrastructure Analysis**

**Scotia CSD Formation Municipal Service Review**

| Utilities and Services | Changes |
|---|---|
| | codes and standards.<br><br>The water treatment facility will be improved through installation of two turbidity meters, upgrades to the chlorination system, and new system electronic controls.<br><br>As part of a separate maintenance project, the fire suppression water tanks will be replaced. |
| Drainage and flood control | Responsibility for drainage and flood control services will be transferred to the Scotia CSD. The stormwater drainage system will be improved through replacement of immediately needed portions, and installation of new and replacement drain inlets and manholes in the residential and commercial areas, as deemed appropriate from a proposed drainage facilities plan and field-identified inspections.<br><br>Flood protection will be improved through relocation of the Wastewater Treatment Facility (WWTF) electrical controls outside flood elevation. |
| Circulation | The road and street network will be improved through repairs that will include a 0.2-foot overlay of asphalt concrete pavement throughout streets affected by the utility infrastructure modification program; patching, leveling with appropriate base course thickness; some curb replacement in kind; repair to the retaining wall at south end of B Street; and safety improvements to address basic signage and stop bars.<br><br>The County will continue to be responsible for maintaining B Street, Church Street, Eddy Street, Main Street, Mill Street, 1st Street, 2nd Street, 3rd Street, 4th Street, 5th Street, and 6th Street. The CSD will take over Bridge Street, North Court, and Williams Street, and will be responsible for all other streets and alleys. |
| Fire protection | The Scotia Volunteer Fire Department will be organized as part of the CSD. As part of a separate maintenance project, the fire suppression water tanks will be replaced. The fire apparatus and the personal gear will be upgraded. |
| Power | PG&E will incorporate existing power supply and distribution systems into its regional operation. TOS will continue to operate the cogeneration plant and sell the power to PG&E. |
| Parks and recreation | Responsibility for parks and recreation services will be transferred to the Scotia CSD. The Scotia Union School District will continue to operate the recreation center. |
| Law enforcement | No change. Law enforcement services will continue to be provided by the Humboldt County Sheriff. |
| Telecommunications | No change. Telecommunications will continue to be available from private providers AT&T and Suddenlink. |

**Table ES-1**

**Summary of Infrastructure Analysis**

**Scotia CSD Formation Municipal Service Review**

| Utilities and Services | Changes |
|---|---|
| Natural gas | No change. Natural gas will continue to be available from private provider PG&E. |
| Cable | No change. Cable services will continue to be available from private providers AT&T and Suddenlink. |
| Solid waste collection and disposal | No change. Solid waste services will continue to be available from private provider Eel River Disposal & Resource Recovery. |

The range of services to be provided by the CSD includes water, wastewater, road maintenance and street lighting, stormwater drainage, parks and recreation, and fire protection. A financial analysis of expected revenues and expenditures was prepared in order to evaluate the CSD's ability to be self-sufficient.

The financial analysis lays out a plan analyzing the CSD's forecasted revenues and expenses. Operation of the CSD would be funded through a mix of property tax allocation (negotiated with Humboldt County) and user fees. Expenses would include personnel services, material and services, capital expenditures, and debt service. The capital improvement plan described above would be funded through a combination of short-term bonds and low-interest long-term loans or bonds. The expected tax revenue, user fees, and expenses were compared to those of other similar districts and cities providing comparable services:

- Tax revenues were estimated at various possible percentage rates (0%, 8.7122%, 15%) of the property taxes collected by the County in Scotia, representative of a CSD with the wide range of services that would be provided by the Scotia CSD. The final tax allocation factor (TAF) percentage will depend on negotiations with the County.

- User fees for all services and reserves were estimated in a range of $165.34 to $184.00/month by Year Five of the CSD's operation, which will vary relative in part to the tax allocation factors. Although it is difficult to find a suitable point of comparison for the entire user fees, due to the wider range of services than is typically provided by CSDs, the portion represented by water and wastewater services, estimated at up to $121.00 for the combined rates, is comparable to that found in similar districts and cities reviewed (range of $108 to $137, with an average of $118), and falls within the range considered affordable in U.S. Environmental Protection Agency (EPA) guidance for these services (range of $113 to $150).

- An initial budget primarily related to Operations and Maintenance (O&M) was prepared for each service area and a combined budget for overall operation of the CSD was projected over a five-year period to include the expected schedule of capital improvement projects. The CSD's projected operating budget will consist of

approximately $536,500 in annual costs for personnel services and $349,000 for materials and services.

- The short-term loan or bonds will be financed entirely by the current owner, TOS. Debt service for the long-term bonds would represent approximately $30.22/month by Year Five of the CSD's operation. This is comparable to the bond levies assessed under the Mello-Roos Community Facilities Act of 1978, which enables cities, counties, special districts, and school districts to establish community facilities districts and to levy special taxes to fund a wide variety of facilities and services.

The overall operating budget relative to services provided, including revenues and expenditures, is consistent with local area agencies and experienced operating costs of the community.

The financial analysis was intended to represent a "worst case" scenario. Although the CSD, as a public entity, would have access to sources of funding (such as, grants and low-interest loans from federal and state agencies), it would be speculative to assign a dollar value at this stage. Similarly, "pooled" bonds (Pooled Transaction Certificates of Participation) funding multi-agency projects offer more advantageous rates. This funding may be obtained through entities like the California Special Districts Association (CSDA) Finance Corporation as outlined in the financial analysis and obtaining them is not considered speculative, as it can be issued with certainty. While in practical application bonds as opposed to grants/loans are considered a fallback position, they were used as the primary option in the analysis to account for the maximum anticipated user fees.

Cost-avoidance, shared facilities, and management efficiencies opportunities are identified in this MSR, most prominently those realized by integrating the Scotia Volunteer Fire District (SVFD) into the CSD structure, followed by opportunities for joint planning and purchases with other local agencies. Local governance and accountability review indicates that the CSD will have the ability to make information available to the public and comply with the Brown Act. The CSD's proposed government will be simple and closely resemble that of other similar agencies in the County. A "status quo" sphere of influence is sustainable and appropriate for the Scotia CSD.

(Note: This MSR was updated in October 2010, based on material submitted to LAFCo staff in August and September, 2010, for final consideration by the LAFCo commission prior to adoption of resolutions for approval of the CSD.)

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**Appendices**

# List of Illustrations

# Abbreviations and Acronyms

| | |
|---|---|
| CCF | 100 Cubic Feet |
| cfs | cubic feet per second |
| gpd | gallons per day |
| gpm | gallons per minute |
| kV | kiloVolt |
| MGD | Million Gallons per Day |
| NTU | Nephelometric Turbidity Units |
| AAF | Average Annual Flow |
| AASHTO | American Association of State Highway and Transportation Officials |
| ADA | Americans with Disabilities Act |
| AMHI | Annual Median Household Income |
| APN | Assessor's Parcel Number |
| AWWF | Average Wet Weather Flow |
| CalARP | California Accidental Release Prevention Program |
| CDF | California Department of Forestry and Fire Protection |
| CEQA | California Environmental Quality Act |
| CIP | Capital Improvement Program |
| CPUC | California Public Utility Commission |
| CSD | Community Services District |
| CSDA | California Special Districts Association |
| DHS | California Department of Health Services |
| EDU | Equivalent Dwelling Unit |
| EMS | Emergency Medical Services |
| EPA | U.S. Environmental Protection Agency |
| ESU | Equivalent Service Unit |

# Abbreviations and Acronyms, Continued

| | |
|---|---|
| FEMA | Federal Emergency Management Agency |
| GC | California Government Code |
| HOA | Home Owners Association |
| HRC | Humboldt Redwood Company |
| I/I | Infiltration and Inflow |
| ISO | Insurance Services Office, Ltd. |
| LAFCo | Humboldt County Local Agency Formation Commission |
| LOS | Level of Service |
| Marathon | Marathon Structured Finance Fund |
| MMWWF-5 | Maximum Month Wet Weather Flow |
| MRC | Mendocino Redwood Company |
| MS4 | Municipal Separate Storm Sewer System |
| MSR | Municipal Service Review |
| NCEMSA | North Coast Emergency Medical Service Authority |
| NCRA | North Coast Railroad Authority |
| NOP | Notice of Preparation |
| NPDES | National Pollutant Discharge Elimination System |
| O&M | Operations and Maintenance |
| PALCO | Pacific Lumber Company |
| PEIR | Program Environmental Impact Report |
| PPC | Public Protection Classification |
| RAS | Return Activated Sludge |
| RWQCB | California Regional Water Quality Control Board, North Coast Region |
| SHN | SHN Consulting Engineers & Geologists, Inc. |
| SVFD | Scotia Volunteer Fire Department |

# Abbreviations and Acronyms, Continued

| | |
|---|---|
| SWRCB | State Water Resource Control Board |
| TAB | Tax Assessment Board |
| TOS | Town of Scotia Company, LLC |
| USDA | U. S. Department of Agriculture |
| USGS | United States Geological Survey |
| VCP | Vitrified Clay Pipe |
| VFD | Variable Frequency Drive |
| WDR | Waste Discharge Requirement |
| WTF | Water Treatment Facility |
| WWTF | Wastewater Treatment Facility |

**Zoning Designations:**

| | |
|---|---|
| C-2/Q | Community Commercial, Qualified |
| IG | Industrial General |
| MH/Q | Heavy Industrial, Qualified |
| U | Unclassified |

**Combining Zone Classifications:**

| | |
|---|---|
| D | Design Control |
| N | Noise |
| P | Planned Development |
| Q | Garage Lots |

# Chapter 1. Introduction

## 1.1 Purpose of Municipal Service Review

### 1.1.1 Overview

The Humboldt County Local Agency Formation Commission (LAFCo) reviews proposals for the formation of new local governmental agencies and changes of organization for all local agencies within Humboldt County. In order for LAFCo to approve the formation of a new agency, information must first be collected that documents the service capabilities of that agency.

This Municipal Service Review (MSR) has been prepared pursuant to LAFCo Guidelines and Procedures, updated April 28, 2001 per AB 2838 and July 15, 2003 per AB 2227 to determine how urban services will be provided to the area upon formation of a Community Services District (CSD) for the existing, privately owned town of Scotia. (Note: This MSR was updated by LAFCo staff in October 2010 for final consideration by LAFCo prior to adoption of resolutions for approval.) This MSR identifies the current service providers, level of service, and transfer of service issues related to the provision of water, wastewater treatment, storm drainage, circulation, fire protection, electrical, parks and recreation, law enforcement, telecommunication, natural gas, cable, and solid waste for the town of Scotia.

### 1.1.2 Regulatory Context

The applicant has submitted a tentative map with Humboldt County to subdivide the Town of Scotia. An additional application has been filed with the LAFCo to form a CSD. A Notice of Preparation (NOP) was prepared and circulated by Humboldt County in compliance with the California Environmental Quality Act (CEQA) (State Clearinghouse # 2007052042). A Draft Program Environmental Impact Report (PEIR) was prepared by SHN Consulting Engineers & Geologists, Inc. (SHN) for the County on behalf of Town of Scotia, LLC (TOS), and circulated by the County for the required 45-day public review and comment period ending in January 2008. The Final PEIR was circulated and is scheduled for a Humboldt County Planning Commission hearing (SHN, 2009).

On November 10, 2009, the Humboldt County Board of Supervisors Certified the PEIR with Resolution No. 09-77 and approved Vesting Tentative Subdivision Map FMS 05-01, allowing for the subdivision of the Town of Scotia into 340 parcels. The County also approved General Plan Amendment GPA 05-01, Rezoning ZR 05-01, and Planned Development Permit PDP 05-01, corresponding to the proposed subdivision.

## 1.2 Scotia Setting

Scotia, which was originally known as Forestville, was founded in 1882 as part of the purchase of 6,000 acres of forested lands along the Eel River in Humboldt County, California (see Figure 1). The Pacific Lumber Company (PALCO) began its logging operations and building of the town shortly thereafter. Scotia was built around the logging industry, and residential units were constructed to house company employees.

Approximately 420 acres of land comprises the subdivision area of Scotia on Assessor's Parcels Number (APN) 205-351-016 and 205-351-018. From the 1880s to 2008, Scotia has operated as a company town, and it was one of the last company-owned and company-operated towns in the nation. The entire town of Scotia, including the buildings, houses, accessory structures, roadways, and community infrastructure, was developed and constructed by PALCO and continues to be maintained by TOS. The residences were constructed and maintained by PALCO for their employees. Under PALCO management, the town of Scotia retained a consistency in layout, streetscapes, and historic design, and presents a well-maintained appearance.

The town of Scotia is located in the Eel River Valley in southern Humboldt County, and is bordered to the east by Highway 101, and to the north, south, and west by the Eel River. Scotia's topography ranges from flat areas in the western and central portions of the town, to sloped terrain in the eastern portion toward Highway 101. Steep, forested hillsides and mountains surround the town and river. The City of Rio Dell is located just north, across the Eel River from Scotia.

### 1.2.1 Project Applicant and Property Ownership

On January 18, 2007, PALCO filed for protection under Chapter 11 of the U.S. Bankruptcy Code.

On July 8, 2008, the court issued its judgment and order confirming the Plan of Reorganization submitted by secured creditor Marathon Structured Finance Fund (Marathon), joined by Mendocino Redwood Company (MRC). Pursuant to that plan, most of the Town of Scotia's real and personal assets transferred to a reorganized entity wholly owned by Marathon, Town of Scotia Company, LLC, now the applicant and project proponent. Under the plan, the active Scotia sawmill facilities and other ancillary office buildings have transferred to a second reorganized entity, Humboldt Redwood Company (HRC) in which Marathon and MRC both have interests (United States Bankruptcy Court for the Southern District of Texas, Corpus Christi Division as "Case No. 07-20027-C-11" under the consolidated title, *In Re Scotia Development LLC, et al, Debtors*.)

As a matter of law and a consequence of the Judgment and Order confirming the Plan of Reorganization, on and after the effective date, July 30, 2008, Town of Scotia Company, LLC has full legal authority to operate the PALCO Scotia businesses; to use, acquire, and dispose of property; retain, compensate, and pay professionals or advisors; settle causes or claims; etc. without any additional approval or supervision by the bankruptcy court or any other agency or entity except as may be expressly provided in the Plan of Reorganization.

### 1.2.2 Existing Uses

Existing uses in Scotia include a mix of commercial, residential, industrial/timber production, public facilities (after the transfer of ownership to the CSD), and recreational, all of which are summarized below (See Figure 2).

**Commercial.** The approximately 13-acre commercial area is located in the northern portion of Scotia, bordering Main Street. Scotia's commercial center is currently zoned Community Commercial Qualified (C-2/Q). Commercial land uses include the U.S. Post Office, a shopping center, beauty/barber shop, movie theater, bank, hardware store, HRC and TOS offices, the Scotia Museum, Scotia Inn, and a number of park-

like landscaped setback areas. The former hospital, located just off Main Street, is used for medical offices and storage space (SHN, September 2007).

**Residential.** There are three residential areas in Scotia with 272 residential units that are currently zoned Unclassified (U). The smallest residential area, known as the North Court Neighborhood is approximately 6 acres, located in the northern corner, adjacent to the Highway 101 Scotia off-ramp. The mid-sized residential area, known as the Williams's Street Neighborhood is approximately 13 acres, located west of the log pond and adjacent to the river. The largest residential area, known as the "Primary Neighborhood" is approximately 40 acres, located south of the commercial center, east of the main industrial area, and is bordered by Highway 101 to the east (SHN, September 2007).

The Primary Neighborhood also contains non-residential land uses that are commonly located in residential areas, including an elementary school (although not within the purview of the LAFCo), two churches, commercial offices (in the former hospital building), and the recreation center. Also within this residential area—although considered part of the public facilities zone—is the fire station (SHN, September 2007).

**Industrial.** Approximately two-thirds of the town of Scotia is devoted to industrial uses. The industrial area, designated Industrial General (IG) in the Humboldt County General Plan and zoned Heavy Industrial/ Qualified (MH/Q), includes: Mill complexes "A" and B, a large remanufacturing plant, a cogeneration plant, fuel and machinery buildings, a planer facility, small and large log sawmills, the log pond, log storage areas, a hardwood chip plant, a sediment pond, and a transfer station (SHN, September 2007).

There is a second, smaller industrial area located west of the large remanufacturing plant complex's lumber storage area and adjacent to the Eel River. It includes a hardwood chip plant, log storage areas, a sediment pond, and transfer station (SHN, September 2007).

**Public Facilities and Recreation.** These areas are currently owned and operated by TOS; however, after the transfer of ownership to the CSD and rezoning, they will be public facilities. Public facilities located adjacent to the industrial area and river, include Fireman's Park, Carpenter's baseball field, the soccer field, and the Wastewater Treatment Facility (WWTF). The water treatment plant is located on the east side of Highway 101. The North Coast Railroad Authority (NCRA) right-of-way, which extends the entire length of Scotia, is also considered a public use (SHN, September 2007).

## 1.3 Framework of Analysis

In preparing the MSR, three requirements were key:

1) The need to provide **levels of service** that are sufficient to meet the forecasted needs of the population and are comparable to those that are currently provided and found in similar communities in the area.

2) The **affordability** of the resulting solutions in terms of fee structure, debt service, etc.

3) The necessity to meet all applicable **regulations.**

The existing services and utilities were analyzed in light of these factors, trying to use fairness and caution. None of the upgrades that are currently proposed preclude future options for the CSD to upgrade its facilities or respond to changing conditions or unforeseen changes in regulations. The CSD will remain able to opt for new or different upgrades, new facilities, joint services with other public entities, etc.

**Level of Service:** The appropriate level of service is that of an existing community with facilities showing normal wear and tear but a healthy life expectancy of at least 20 years. The level of service should be maintained throughout the service life, accounting for forecasted growth, and should be comparable to that of other similar communities in Humboldt County.

The CSD and taxpayers must not be burdened with under-par infrastructure or excessive maintenance requirements; on the other hand, the community of Scotia is an existing one and it would not be reasonable to require that Scotia's infrastructure be rebuilt to match the profile of a newly-built development.

**Affordability:** The future CSD and the taxpayers must not be saddled with excessive fees or debt service. As a private entity, TOS presently has no access to the funding sources available to a public entity, and a conservative approach was used in the financial analysis underpinning the MSR.

Once established, the CSD will able to pursue such funding, but prudence was used in the financial planning to avoid presenting an excessively optimistic analysis. As a public entity, the future CSD will retain the ability to make more sweeping decisions if deemed appropriate.

**Regulatory Requirements:** SHN and TOS looked ahead in terms of capacity to meet current regulations as well as reasonably foreseeable changes in regulations for the short- to medium-term. This MSR and the Detailed Engineering Analysis (Appendix A) that supports it plan for upgrades that will allow the infrastructure to accommodate Scotia's growth needs for the next two decades under current and reasonably foreseeable regulations.

However, regulatory requirements can change with every re-issue of a permit (for example, the National Pollutant Discharge Elimination System [NPDES] and Waste Discharge Requirement [WDR] permits). It would not be reasonable to require that the facility upgrades be planned for every possible change in regulations.

## 1.4 Elements of the Municipal Service Review

As part of its review of municipal services, the LAFCo is required to prepare a written statement of its determination with respect to each of the following (Governor's Office of Planning and Research, 2003):

1) infrastructure needs or deficiencies,

2) growth and population projections for the affected area,

3) financing constraints and opportunities,

4) cost avoidance opportunities,

5) opportunities for rate restructuring,

6) opportunities for shared facilities,

7) government structure options, including advantages and disadvantages of consolidation or reorganization of service providers,

8) evaluation of management efficiencies, and

9) local accountability and governance.

In addition, California Government Code (GC) Section 56425 requires that the LAFCo evaluate the sphere of influence of each local governmental agency within the county.

In order to present the project-specific information in a logically unfolding sequence, the information in this MSR was arranged as follows:

Chapter 1: Introduction

Chapter 2: Growth and Population (Element No. 2)

Chapter 3: Infrastructure Analysis (Element No. 1)

Chapter 4: Finances and Rate Structure (Elements Nos. 3 and 5)

Chapter 5: Cost Avoidance Opportunities and Shared Facilities (Elements Nos. 4 and 6)

Chapter 6: Evaluation of Management Efficiencies (Element No. 8)

Chapter 7: Local Governance and Accountability (Element No. 9)

Chapter 8: Government Structure (Element No. 7)

Chapter 9: Sphere of Influence

Chapter 10: References

# Chapter 2. Growth and Population

## 2.1 Current Population

As of January 2009, the TOS housing office estimates that there are 272 residential dwelling units in Scotia, with an estimated residential population of approximately 860 persons; TOS employs 67 people, including those who work at the Scotia Inn; with an estimated 88 additional employees working for other businesses in Scotia (Frank Bacik, personal communication). Based on the U.S. Census, and using census blocks that are approximately coterminous with the town, the year 2000 population was 849 (Tract 06023- 011100 and blocks 4 through 7, 10 through 25, 27 through 33, and 38) (SHN, September 2007).

## 2.2 Future Population Growth

Scotia is an unincorporated community and is located within the jurisdiction of Humboldt County with regard to land use regulations. The town's existing uses are not identified in the current General Plan land use designations and zones. However, the proposed Humboldt County General Plan Amendment and Rezone will reflect current land uses in Scotia that have been occurring for the last 100 years (see the PEIR for more detailed information). After the subdivision and sale of lots, there will be five vacant parcels. These parcels comprise the only non-developed areas in Scotia.

Scotia does not have a current community plan. As part of the ongoing Humboldt County General Plan update process, it is anticipated that the County and CSD will collaborate on the preparation of a community plan for Scotia when the CSD is formed. For more detailed information, see the PEIR.

There is limited land available for development within the proposed CSD boundaries. The vast majority of parcels are "substandard" when compared to County Zoning requirements for Residential One-Family zone, especially regarding lot sizes, yard, and maximum ground coverage requirements, thus the necessity of the Planned Development (P) combining zone. The P combining zone allows these non-conforming lots to be created because the town was developed prior to the zoning code being adopted. In essence, with the P overlay, existing non-conforming standards become the standards for each individual lot. However, County code does not allow a lot that does not comply with the code to change in a way that further exacerbates non-compliance. Simply, there is not adequate space for most residential zone lots to accommodate secondary dwelling units. Of the existing residential lots, only 11 conform to current zoning requirements. Of those 11, only 5 have adequate size or yard dimensions or maximum lot coverage to accommodate secondary dwelling units. At this time, it is speculative to say that the vacant residential lots would support second dwellings, because it would depend on the extent of site development.

The industrial areas of the town zoned MH/Q will be used by HRC as it continues to harvest timber and produce lumber at the Scotia mill. Essentially, areas used for outdoor lumber storage and the sedimentation pond will continue to be used as part of the lumber mill operations, are not considered vacant, and so will not be available for development. No plans exist to change from lumber production to some other industrial use in the foreseeable future. The subdivision and formation of a CSD will not result in changes to this existing condition.

There are physical restraints to development outside of the proposed boundaries. The town of Scotia is located adjacent to the City of Rio Dell. The Eagle Prairie Bridge (State Route 283) links Rio Dell and Scotia. Scotia is bound to the east by Highway 101 and to the north, south, and west by the Eel River. Scotia's topography ranges from flat areas in the west and central parts of the town, to sloped terrain in the eastern portion toward Highway 101. Steep, forested hillsides and mountains surround the town and river. There is no useable land available in the immediate vicinity of Scotia for development.

## 2.3 Determination

There is limited population growth in Scotia due to available vacant land, substandard lot sizes that cannot support additions, and physical constraints. Current industrial uses are expected to remain the same, and log storage areas and the sedimentation pond will continue to be used. Engineering studies have concluded that the existing WWTF historically handled wastewater flows and loads substantially greater than those that will exist after completion of the collection system upgrades proposed as part of the project. The WWTF is expected to have sufficient capacity to serve the newly created residential and commercial lots (SHN, November 2007).

**The subdivision and formation of a CSD will not result in a need to increase capacity of the WWTF and there is an adequate water supply to sustain ongoing and future industrial operations.**

# Chapter 3. Infrastructure Analysis

TOS currently provides the majority of public services and utilities for the town of Scotia. There are no new proposed facilities or services. The only change is the service provider, from TOS to the proposed Scotia CSD. As part of the transfer of services and utilities to a new CSD, a detailed utility description has been prepared and repairs to existing infrastructure have been identified (see Detailed Engineering Analysis in Appendix A); and a schedule for these repairs has been developed (see Appendix B).

The proposed infrastructure improvements are in line with comparable system needs for a town similar in size and character to Scotia. Table 3-1 presents a quick overview, and the rest of this section provides analyses of each service to be provided to the CSD area. A more comprehensive analysis of the infrastructure upgrades is provided in the Detailed Engineering Analysis (Appendix A).

**Table 3-1**

**Summary of Infrastructure Analysis**

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| Utilities and Services | Changes |
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| Wastewater collection, treatment, and disposal | Responsibility for wastewater collection, treatment, and disposal services will be transferred to the Scotia CSD[1]. The wastewater collection system will be improved through relocation of the residential/commercial lines to the new Scotia CSD public right-of-way, using 6-inch minimum diameter pipe; replacement of all service laterals using 4-inch minimum diameter pipe and the installation of service cleanouts; and installation of new manholes and cleanouts in residential and commercial areas.<br><br>The wastewater treatment facility will be improved through relocation of the electrical controls outside flood elevation; installation of new drives on the primary clarifier, deep well pumps, shallow well pumps, and secondary clarifier; leveling the primary weir; replacing the shallow well pumps; addition of a solids contact basin or small activated sludge basin, and an additional secondary clarifier; and installation of return activated sludge pumps and blowers. |
| Water supply, storage, treatment, and distribution | Responsibility for water supply, storage, and treatment services will be transferred to the Scotia CSD. TOS[2] will transfer the water right license to the Scotia CSD. The water distribution service will be improved through relocation of distribution lines to the public right-of-way, installation of all new services from the new distribution lines to residences with meters, and verification of serviceability or installation of new services and meters to commercial and industrial users.<br><br>Raw and treated water storage tank foundations will be modified to meet current seismic codes and standards.<br><br>The water treatment facility will be improved through installation of two turbidity meters, upgrades to the chlorination system, and new system electronic controls. |

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**Summary of Infrastructure Analysis**

**Scotia CSD Formation Municipal Service Review**

| Utilities and Services | Changes |
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| | As part of a separate maintenance project, the fire suppression water tanks will be replaced. |
| Drainage and flood control | Responsibility for drainage and flood control services will be transferred to the Scotia CSD. The stormwater drainage system will be improved through replacement of immediately needed portions, and installation of new and replacement drain inlets and manholes in the residential and commercial areas, as deemed appropriate from a proposed drainage facilities plan and field-identified inspections.<br><br>Flood protection will be improved through relocation of the WWTF[3] electrical controls outside flood elevation. |
| Circulation | The road and street network will be improved through repairs which will include 0.2-foot overlay of asphalt concrete pavement throughout streets affected by the utility infrastructure modification program; patching, leveling with appropriate base course thickness; some curb replacement in kind; repair to the retaining wall at south end of B Street; and safety improvements to address basic signage and stop bars.<br><br>The County will continue to be responsible for maintaining B Street, Church Street, Eddy Street, Main Street, Mill Street, 1st Street, 2nd Street, 3rd Street, 4th Street, 5th Street, and 6th Street. The CSD will take over Bridge Street, North Court, and Williams Street, and will be responsible for all other streets and alleys. |
| Fire protection | The Scotia Volunteer Fire Department will be organized as part of the CSD. As part of a separate maintenance project, the fire suppression water tanks will be replaced. The fire apparatus and the personal gear will be upgraded. |
| Power | PG&E will incorporate existing power supply and distribution systems into its regional operation. TOS will continue to operate the cogeneration plant and sell the power to PG&E. |
| Parks and recreation | Responsibility for parks and recreation services will be transferred to the Scotia CSD. The Scotia Union School District will continue to operate the recreation center. |
| Law enforcement | No change. Law enforcement services will continue to be provided by the Humboldt County Sheriff. |
| Telecommunications | No change. Telecommunications will continue to be available from private providers AT&T and Suddenlink. |
| Natural gas | No change. Natural gas will continue to be available from private provider PG&E. |

**Table 3-1**

**Summary of Infrastructure Analysis**

**Scotia CSD Formation Municipal Service Review**

| Utilities and Services | Changes |
|---|---|
| Cable | No change. Cable services will continue to be available from private providers AT&T and Suddenlink. |
| Solid waste collection and disposal | No change. Solid waste services will continue to be available from private provider Eel River Disposal & Resource Recovery. |

1. CSD: Community Services District
2. TOS: Town of Scotia, LLC
3. WWTF: Wastewater Treatment Facility

## 3.1 Wastewater Collection, Treatment and Disposal

### 3.1.1 Existing Level of Service and Improvements

TOS maintains and operates Scotia's wastewater collection, treatment, and disposal system, which are proposed to be acquired and operated by the CSD.

#### 1) Collection System

The wastewater collection system, including portions of system pipelines, service laterals, manholes, and cleanouts, was constructed approximately 50 to 70 years ago (or more) to service a company-owned town. To that end, many collection lines, service laterals, and manholes are located under buildings, in residential yards, and are experiencing high Inflow and Infiltration (I/I) during storm events. Additionally, the pipe materials are primarily Vitrified Clay Pipe (VCP), in various states of serviceable hydraulic capacity.

Given the condition of the existing collection system as determined through inspection processes and the fact that much of the system is located outside of typical right-of-way areas (in backyards, under buildings, etc.—places that will become private property), a majority of the system needs to be replaced. A preliminary layout of a replacement system has been devised. Pending final design, some lines may need to be realigned from the proposed alignments shown on Figure 1-2 of the Detailed Engineering Analysis (Appendix A) in order to maintain gravity flow within the wastewater collection system.

The repairs to the wastewater collection system would include the following tasks:

- The residential/commercial collection system will be relocated and constructed using 6-inch minimum diameter pipe.
- All service laterals will be replaced using a 4-inch minimum diameter pipe to each building and will include a service cleanout.

- New manholes and cleanouts will be installed in the residential and commercial areas. HRC will be responsible for the repair of existing manholes on the industrial property.

These upgrades to the system are intended to significantly reduce I/I, thus reducing non-wastewater flows (stormwater primarily during the winter months) to the WWTF.

A detailed breakdown of proposed repairs is provided in Chapter 1 of the Detailed Engineering Analysis (Appendix A).

**2) Wastewater Treatment**

The Scotia WWTF is located on Williams Street, west of the main industrial area, north of the soccer field, and within the 100-year floodplain of the Eel River. The WWTF was constructed in 1954 and consists of the treatment headworks, a primary clarifier, a redwood slat trickling filter, a secondary clarifier, a sludge digester, a chlorine contact basin, a series of three treatment ponds, and a final summer percolation discharge pond (summer) or permitted Eel River discharge (fall, winter, spring).

The treatment plant process has an estimated existing hydraulic capacity of approximately 1.0 Million Gallons per Day (MGD). The Average Annual Flow (AAF) of wastewater treated is estimated at 0.240 MGD, with an Average Wet Weather Flow (AWWF) of 0.288 MGD and a Maximum Month Wet Weather Flow (MMWWF-5) of 0.420 MGD (Detailed Engineering Analysis Table 2-6, Appendix A).

The wastewater treatment system is operated by licensed operators. The WWTF has a State-regulated quantity of chlorine gas (4,400 pounds), which must also be managed according to the California Accidental Release Prevention Program (CalARP) Risk Management Plan. The proposed repairs to the existing WWTF incorporate upgrades to minimize the risk of the facility's location within the 100-year floodplain, provide redundancy for major treatment processes, and increase the secondary treatment capacity. A layout of the existing WWTF is shown in Figure 2-1 of the Detailed Engineering Analysis (Appendix A).

The existing WWTF is now operating under a new NPDES permit, and to date has met its permit conditions. In addition, an existing Cease and Desist Order for the WWTF sets forth a compliance schedule to develop and implement a pollution prevention plan (California Regional Water Quality Control Board North Coast Region [RWQCB], September 20, 2006).

The wastewater treatment system must provide reliable secondary treatment for at least the next 20 years. To achieve satisfactory performance within this timeframe, it will be necessary to upgrade or replace major components of the existing treatment system. These upgrades are summarized below:

**A) Electrical Controls**

The electrical controls will be relocated to a new elevated control room, above the 100-year flood elevation. The control room will contain the Variable Frequency Drive units (VFDs) for pump motors and a new electrical control panel.

### B) Primary Treatment

Primary treatment consists of a primary clarifier and associated deep well pumps. Deep well pumps were replaced in 2007. Recommended upgrades to the primary treatment system include:

- replacing the primary clarifier drive,
- installing VFDs on deep well pumps, and
- leveling the top of the primary weir.

### C) Secondary Treatment

With the installation of VFD motors on the shallow well pumps, the recirculation rate can be increased and the filter can be loaded at higher rates. Using the VFDs, it is estimated that the existing trickling filter will have the capacity to treat projected loadings.

Recommended improvements to the secondary treatment system include:

- Replacement of shallow well pumps with submersible pumps not impacted by flooding
- Installation of VFDs on the shallow well pumps
- Construction of a solids contact or small activated sludge basin following the trickling filter to operate as a combined suspended growth/trickling filter process
- Installation of Return Activated Sludge (RAS) pumps to transfer solids from secondary clarifiers to the solids contact basin
- Installation of blowers for the solids contact process with controls installed in the proposed control room
- New drive for existing secondary clarifier and horizontal baffling to increase settling
- Construction of an additional secondary clarifier to provide redundancy and improve treatment performance during peak flow events

### D) Biosolids

The digester has the capacity to handle projected loadings; however, structural improvements will be necessary. Although the extent of these improvements will be assessed during design, an estimate of probable cost has been included in the upgrade costs.

The tertiary ponds are full of biosolids. The cost of initial and periodic removal biosolids from the tertiary ponds was included in the financial analysis as part of Operations and Maintenance (O&M).

Discussions with TOS have indicated that land application of dewatered biosolids is the preferred alternative for biosolids disposal. During dry weather, biosolids would be applied from the proposed drying beds onto forested land. In addition, upgrade costs include new covered drying beds with a drainage system that discharges into the influent sanitary sewer and a truck to dispose of biosolids.

**3) Wastewater Disposal**

During high winter flows, treated effluent is discharged directly into the Eel River. During the summer months, when discharges to the Eel River are prohibited, the percolation pond is used for disposal of treated effluent. The pond is a temporary construction and used only in the summer (May-October), to percolate treated wastewater from the WWTF. The Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers, the Clean Water Act Section 401 Water Quality Certification from the RWQCB, and the California Department of Fish and Game Code Section 1603 agreement allow for the construction of the temporary percolation pond, which is annually removed by TOS.

Wastewater discharges from the Scotia Mill and Town of Scotia are currently covered under Waste Discharge Requirements Order No. 2006-0020, NPDES Permit No. CA0006017. These waste discharge requirements are associated with wastewater discharges from the industrial operations at the Scotia Mill and the existing WWTF, and do not cover stormwater discharges from the HRC Scotia Mill operations or the town of Scotia, which are discussed in more detail under section 3.3 of this MSR. The NPDES permit authorizes the WWTF to discharge treated wastewater from Scotia municipal waste treatment facility and 1.0 MGD from the Scotia steam electric power plant (including approximately 0.86 MGD of once-through cooling water).

Wastewater disposal alternatives are being investigated under a separate NPDES program with the RWQCB. TOS is planning for summer wastewater disposal by means of storage and evaporation from the existing log pond.

### 3.1.2 Scotia Level of Service with Improvements

Wastewater systems are currently operated by CSDs in several unincorporated communities in Humboldt County, including McKinleyville, Redway, and Shelter Cove.

According to the PEIR, the formation of a CSD for Scotia would provide an organizational structure to operate and maintain the wastewater facilities while the subdivision would create individual lots for existing dwellings or structures and other related facilities. The CSD and subdivision would not result in a substantial increase in population or demand on wastewater systems. Wastewater system capacities are sufficient to serve the existing community and the foreseeable growth. The former Mill “A” facility is currently being converted into light industrial uses. The Eel River Brewing Company brewery is required to provide pre-treatment to minimize the impact of its discharge on the WWTF.

Wastewater collection systems are being upgraded to meet current standards of practice to serve residential and commercial areas. New collection lines, service laterals, manholes, and cleanouts will be constructed to upgrade the existing collection system and to remove collection system facilities from under buildings and into easements accessible to O&M personnel.

The planned upgrades to the collection system are expected to reduce I/I significantly and therefore flows entering the WWTF will also decrease. For planning purposes, I/I reductions have been estimated at 70%. This is believed to be a conservative estimate because the upgrades target the worst sources of I/I identified, and can therefore be reasonably expected to curb I/I by an even greater proportion.

As a result, flows reaching the WWTF will decrease substantially. Even factoring in all available residential and commercial site development, the wastewater inflows after rehabilitation of the collection system would be well below current operating conditions (see Table 2-6 of the Detailed Engineering Analysis, Appendix A). The current permitted capacity of the WWTF is 1.0 MGD. The proposed upgrades to the WWTF will provide the WWTF with the ability to meet flows and loadings forecasted for the next 20 years.

Currently, the two regulated point source dischargers in Scotia are the cogeneration plant and the WWTF, which are regulated by the same permit. TOS would continue to operate and maintain the cogeneration plant. The CSD will assume responsibility for ownership and maintenance of the WWTF. Given the changes proposed in this MSR, the CSD would require a change of name on the existing waste discharge permit. If substantial changes not planned in this MSR were to occur in the future, a new waste discharge permit would need to be pursued by the CSD.

### 3.1.3 Implementation Schedule

A detailed breakdown of costs and system improvements for the wastewater treatment and disposal is listed in Chapters 2 and 3 of the Detailed Engineering Analysis (Appendix A). Proposed wastewater system infrastructure modifications will occur concurrently with proposed domestic water distribution system and stormwater collection system improvements. A preliminary capital improvement program being proposed by TOS indicates construction of the wastewater collection, treatment, and disposal system starting in 2011 and continuing into 2017.

### 3.1.4 Determination

Ongoing upgrades to the existing infrastructure to meet level of service standards will bring the services into compliance with regulations and standards of practice that will become applicable as a public entity. With completion of these upgrades, the Scotia CSD will be able to continue providing wastewater collection, treatment, and disposal services to the town of Scotia for an additional 20 to 30 years without creating negative impacts on the level of service or the environment. Completion of wastewater facilities upgrades is part of the ongoing maintenance. Upon formation of the Scotia CSD, these facilities will have the capacity to meet levels of service standards and standards of practice normally associated with such services as well as comply with applicable regulatory requirements.

**With completion of the collection and treatment infrastructure upgrades, the Scotia CSD is an appropriate wastewater service provider for the town of Scotia.**

## 3.2 Water Supply, Storage, Treatment, and Distribution

### 3.2.1 Existing Level of Service and Improvements

TOS operates and maintains Scotia's water systems. The domestic Water Treatment Facility (WTF) is located on the hillside across Highway 101, east of Scotia. Currently, TOS's WTF and distribution system provides potable water to the town of Scotia and to TOS and HRC facilities. The California Department of Health Services (DHS) regulates the potable water system.

**1) Water Supply**

The Eel River Watershed, covering a drainage area of 3,684 square miles, is the third largest in the State of California. Based on data obtained from the California Department of Water Resources for January 1992 to the present at the Scotia gaging station, annual median flow was 1,900 cubic feet per second (cfs); median flow from May through November was 380 cfs, and median flow from December through April was 12,200 cfs. The $10^{th}$ percentile flow was 103 cfs and the $90^{th}$ percentile flow was 21,000 cfs (California Department of Water Resources, 2009). Peak discharge happened in 1964 and is estimated at approximately 752,000 cfs (Costa and Jarrett, 2008).

TOS owns Eel River diversion entitlements of up to 4,588,500 gallons per day (gpd) for drinking water, mill processes, and fire supply (7.1 cfs, or 4.6 MGD) and can provide adequate supply for the town of Scotia and HRC mill operations (Water Right License 6373). Historical records reviewed for the Detailed Engineering Analysis (Appendix A) indicate that under current conditions, the maximum daily usage was 601,000 gpd, and the average was 484,400 gpd. There is substantial reserve capacity for any reasonably foreseeable industrial development with the current water treatment system. New or expanded drinking water facilities are not necessary.

In the future there may be more light industrial operations, using the partially vacant Mill "A" building for which there is an adequate supply of water. TOS also owns the water intake structure, raw water pumping station, and raw water transmission system.

TOS will transfer the water right license to the Scotia CSD, setting aside a contractual right that guarantees HRC a specific quantity of water. The Scotia CSD will operate the diversion facility itself for purposes of conveying its own water. Regarding delivery of the water, this arrangement is structured to require the Scotia CSD to deliver the water or else give HRC the right to use the diversion facility—and any replacement facility—to divert and convey its own water supply. HRC will maintain the distribution of the water for industrial uses and fire suppression. In short, TOS would convey the water right and the diversion works to the CSD.

**2) Water Storage and Distribution**

The water intake is located in an infiltration gallery in the bed of the Eel River. A pumping station and piping system transfers raw water to a 1,000,000-gallon steel tank located on a concrete pad east of the WTF. The water flows to the WTF by gravity. Following treatment, finished water is

stored in a 488,000-gallon steel tank located below the WTF, directly to the west. According to the Detailed Engineering Analysis (Appendix A), the finished water storage tank foundation will require a seismic upgrade.

The domestic water distribution system needs complete replacement for lines 3 inches in diameter and smaller because lines are leaking, damaged, or unable to meet current standards (4 inch minimum diameter). As shown in the Detailed Engineering Analysis (Appendix A), over 40% of the current water usage is unaccounted for (192,000 gpd out of an average treated water production of 405,350 gpd). Unaccounted-for water may include unmetered industrial service connections, public facilities, parks and schools; loss due to leakage; and WTF losses (from filter backwashes). System loss due to leakage is believed to be a significant source of unaccounted-for water; the water supply system was installed in the 1930s and 1940s and much of it is brittle cast-iron pipe.

Proposed upgrades to the system include replacement of over 9,500 feet of main water lines, and installation of meters at every residential and commercial service connection in the domestic water system. Monitoring water use will also facilitate identification of leaks.

Additional proposed upgrades include the rerouting of certain existing distribution lines to avoid proposed property and easement/access issues for system maintenance and operation. The existing water distribution layout for Scotia is presented in Figure 4-1 of the Detailed Engineering Analysis (Appendix A). Distribution system replacement components will include:

- all new services from the new distribution lines (relocated to avoid property, structure, and easement conflicts) to residences with meters, and
- verified serviceable or installation of new services and meters to commercial and industrial users.

Because the town of Scotia is not yet a public entity and therefore does not have its own standards, outside references were used to establish baseline standards in order to determine what improvements would be proposed for Scotia's systems during initial CSD formation, and subsequent capital improvements planning (for upgrading system components to area municipal standards). These include the nearby cities of Rio Dell and Fortuna's standard improvement specifications, referred to in the Detailed Engineering Analysis (Appendix A) as the "City Standards."

Replacement of the 3-inch and smaller diameter distribution lines will meet current "City Standards," which require a minimum line size of 4 inches. Modifications to the distribution system will also include construction of facilities to provide a combination potable domestic and fire suppression water system. Figure 4-4 of the Detailed Engineering Analysis (Appendix A) shows the proposed Scotia combined water system layout.

**3) Fire Suppression Water**

The current fire supply tank farm is accessible by means of an existing road. The two, 500,000-gallon tanks share a level pad on the north side of the access road, independent from the drinking water supply tanks located on the south side of the access road. The water tank farm and surrounding land are zoned for

timber production and share the setting with second-growth timber. The tanks are surrounded by a clear zone to keep debris and falling limbs and trees away from the tanks.

In October 2008, engineers recommended that the two existing 500,000 gallon water tanks used for fire protection, and located at the tank farm east of Highway 101 be replaced by one new 750,000-gallon concrete water tank (SHN, October 2008). The new tank will best serve the fire protection needs of the town and industrial facilities well into the future, as well as limiting the liability of the CSD.

The existing industrial fire suppression water distribution system (excluding the new tank) will be owned and operated by HRC. Portions of the existing fire suppression water distribution system (Figure 4-3 of the Detailed Engineering Analysis, in Appendix A) will be incorporated into the new domestic water system. The Scotia CSD will take over the existing domestic (residential and commercial areas) Scotia fire distribution system. Modifications and an upgraded service to segregate the industrial system from residential and commercial will be paid for by TOS. The new Scotia CSD domestic system construction, incorporating modifications to accommodate becoming a combined potable/fire water system, will allow the Scotia CSD and HRC fire systems to work independently of each other, yet have supply redundancy in emergency situations.

A detailed breakdown of costs and system improvements is listed in Chapter 4 of the Detailed Engineering Analysis (Appendix A).

**4) Water Treatment**

The WTF is functioning, is in good condition, and has been well maintained. A layout of the existing WTF is shown as Figure 5-1 of the Detailed Engineering Analysis (Appendix A).

The water treatment system is operated by licensed operators. The WTF has a State-regulated quantity of chlorine gas (600 pounds), which must also be managed according to the CalARP Risk Management Plan (SHN, September 2007).

The water treatment system consistently produces high quality water. Filter effluent turbidity (which is recorded daily) indicates that average finished water turbidities under current conditions were less than 0.06 Nephelometric Turbidity Units (NTU). During this period, the maximum daily turbidity recorded was 0.50 NTU and consistently low finished water turbidities were maintained even when raw water turbidity exceeded 100 NTU (see Detailed Engineering Analysis, Appendix A).

The disinfection system feed rates and dosages are monitored on a daily basis to ensure that the chlorine residual is maintained throughout the system and to comply with California DHS requirements. A chlorine residual measurement is obtained from a service in the distribution system on a daily basis. Based on the water system filtration report, the residuals average 0.3 milligrams per Liter (Detailed Engineering Analysis, Appendix A).

Historical records cited in Section 5.4 of the Detailed Engineering Analysis (Appendix A) indicate a potable water treatment capacity of 622,000 gpd under the current loading conditions. The maximum daily usage in that period was 601,000 gpd, and the average was 405,350 gpd. The limiting portions of the treatment

system as currently operated can produce 1,244,000 gpd. The treatment could be increased, without significant changes in operation, to produce 1,450,000 gpd.

Two turbidity meters will be installed at the plant, upgrades will be made to the chlorination system, and new system electronic controls will be constructed for more efficient water treatment and operations.

A detailed breakdown of costs and system improvements is listed in Chapter 5 of the Detailed Engineering Analysis (Appendix A). A detailed breakdown of annual O&M costs is included in the Financial Analysis (Appendix C).

### 3.2.2 Scotia Level of Service with Improvements

Water distribution systems are being upgraded to meet current standards of practice to serve residential and commercial areas. In response to formation of the CSD, the old domestic distribution water lines need to be replaced, and water meters, installed. New services will be completed to meet current standards of practice for several local municipalities, (such as, Fortuna). Modifications to the transmission and distribution system will also include construction of facilities to provide a combination potable domestic and fire suppression water system, thus separating Scotia water infrastructure from HRC mill facilities infrastructure.

The existing industrial fire suppression water distribution system (excluding the new tank) will continue to be owned and operated by HRC, with appropriate easement access negotiated with the Scotia CSD for raw water to be acquired and independently pumped (by CSD-operated pumps) to the existing one million gallon raw water storage tank (and then diverted to the existing raw water fire tanks and the treatment plant where water is subsequently treated and stored in the existing 488,000-gallon tank). Portions of the existing non-industrial fire suppression water distribution system will be incorporated into the new domestic water system.

Service to residents will not be significantly interrupted by the infrastructure improvements, as this type of work is typically performed in municipalities to upgrade or modify existing infrastructure.

Historical records cited in Section 5.4 of the Detailed Engineering Analysis (Appendix A) indicate a potable water treatment capacity of 622,000 gpd under the current loading conditions. The maximum daily usage in that period was 601,000 gpd, and the average was 484,400 gpd. The limiting portions of the treatment system as currently operated can produce 1,244,000 gpd. The treatment could be increased, without significant changes in operation, to produce 1,450,000 gpd. The current water right allows a diversion of up to 4,588,500 gpd.

There is substantial reserve capacity for any reasonably foreseeable industrial development with the current water treatment system. As discussed earlier in Section 2.3, the possibility of growth is extremely limited by physical conditions in Scotia. No new or expanded water resource entitlements would be needed. Water system capacities are sufficient to serve the existing community. No new water treatment facilities or expansion of existing facilities would result from the CSD and subdivision; however, improvements are being prompted by the proposed transfer of operations.

In addition, the planned upgrades to the water supply system, and particularly the replacement of a significant portion of the water main lines, will result in decreased losses and therefore in added capacity. The current water supply system is adequate to fulfill the demand on the system and the proposed CSD and subdivision would not cause or create a substantial increase in the existing water demand for the town of Scotia.

Water systems are currently provided by a CSD in several unincorporated communities in Humboldt County, including McKinleyville, Redway, and Shelter Cove.

### 3.2.3 Implementation Schedule

TOS will be carrying out upgrades to the existing infrastructure to meet level of service standards prior to the CSD formation.

Water system infrastructure modifications will occur concurrently with proposed wastewater collection and stormwater collection system improvements. A preliminary capital improvement program proposed by TOS indicates construction of the water supply, storage, treatment, and distribution system starting in 2011 and continuing into 2014.

### 3.2.4 Determination

There is substantial reserve capacity for any reasonably foreseeable industrial development with the current water treatment system. The Scotia CSD will be able to provide water supply storage, treatment, and delivery services to the town of Scotia and its residents without creating negative impacts on the existing level of service or the environment.

**With completion of the storage, distribution and treatment infrastructure upgrades, the Scotia CSD is an appropriate water service provider for the town of Scotia.**

Completion of water facilities upgrades is part of the ongoing maintenance. Upon formation of the Scotia CSD, these facilities will have the capacity to meet levels of service standards and standards of practice normally associated with such services as well as comply with applicable regulatory requirements.

## 3.3 Drainage and Flood Control

### 3.3.1 Existing Level of Service and Improvements

#### 1) Stormwater Drainage

HRC mill facilities and Scotia storm drain systems have outfalls to the Eel River and the log pond. The log pond is being used as a stormwater treatment facility as well as for treated wastewater discharge. Humboldt County and State of California highway drainage facilities also tie into the existing storm drain system at various locations. TOS currently provides maintenance for the storm drain system. Culverts associated with County-maintained roads in Scotia are maintained by Humboldt County. TOS manages the drainage systems that are not associated with County-maintained roads (SHN, September 2007).

In the past, the town's sewer system functioned as a combined sanitary sewer and stormwater collection system. However, as part of a concerted, all known stormwater connections have been separated from the sanitary sewer system. Smoke test studies have been conducted to help identify and disconnect stormwater inflow piping. Additional smoke testing is also anticipated to be performed in the future, as a part of TOS's effort to comply with NPDES permit requirements (Detailed Engineering Analysis, Appendix A).

Similar to the water and wastewater collection systems, the stormwater collection system has major piping located under existing buildings. Taking into consideration the location of the main lines, along with information gathered from 2006 visual and Closed Circuit Television inspections, a preliminary estimate of repairs has been prepared. The proposed repairs are based upon:

- replacement of immediately needed portions of the existing system, and
- installation of new and replacement drain inlets and manholes in the residential and commercial areas (HRC will repair existing drain inlets and manholes on their industrial property).

**2) Floodplains and Flood Protection**

Based on review of the July 1982 Flood Insurance Rate Map for Scotia (FEMA, 1982), there are several locations in Scotia that are located within the 100-year flood hazard area. Areas within Flood Zone A30 (areas with a 1% annual chance of flooding and a 26% chance of flooding over a 30-year period) include the existing WWTF and the associated treatment ponds and percolation pond, areas west of Railroad Avenue, the soccer field, Fireman's Park, Carpenter's Field, the chip plant, and portions of the new sawmill and planer building. Some portions of the new sawmill are in Flood Zone B (areas less than 1% annual chance of flooding), which also extends parallel to a number of homes along Railroad Avenue (SHN, September 2007).

Numerous large floods have occurred in Scotia as a result of intense winter storms and historical upslope land disturbances. The highest recorded Eel River discharge at the Scotia gage is 752,000 cubic feet per second (Costa and Jarrett, 2008), which occurred on December 23, 1964, and had an estimated recurrence interval of 290 years. A berm (designed by LACO Associates) is now located at the HRC hardwood deck area to detain future floodwaters. The berm was designed using large riprap on the face and in a keyway that was grouted with concrete into the substrate. The berm is located in the lumber and log deck areas of the HRC mill operations.

### 3.3.2 Scotia Level of Service with Improvements

Storm drainage systems are currently provided by CSDs in several unincorporated communities in Humboldt County including McKinleyville, Redway, and Shelter Cove.

According to the PEIR, the proposed subdivision of Scotia would not result in an increase in population or development that could cause an increase in demand for stormwater infrastructure. Improvements to the storm drainage system are proposed to meet current standards of practice including replacement of existing, pipe, installation of new and replacement drop inlets, and manholes. Drainage and wastewater infrastructure will be separated after reconstruction. As Scotia is currently "built out," existing storm drain lines will not require size upgrades. However, stormwater modeling and facilities planning will be conducted

to confirm system component capacities. The proposed CSD and subdivision would not involve any proposed land use changes from existing conditions and would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality.

The proposed CSD and subdivision would not result in any physical modifications to the existing drainage pattern and do not involve alteration of a stream course or river. A minor increase in runoff associated with the development of three vacant residential and two commercial parcels could occur under the proposed subdivision. The impact of this increase on the area stormwater drainage system is not expected to exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Although there are existing uses located in flood hazard areas within the town of Scotia, the proposed CSD and subdivision would not expose people or structures to a significant risk of loss, injury, or death, including flooding as a result of higher river flows, above the existing level of exposure. As part of the WWTF upgrades, the electrical controls will be relocated outside flood elevation (see Section 3.1.1).

According to the PEIR, during the 2006 NPDES permit renewal process for the Scotia Mill and Town of Scotia, it was determined that industrial stormwater discharges from the Scotia Mill operations would best be regulated under the General Industrial Permit for Stormwater Discharges associated with Industrial activity (WQ Order No. 97-03-DWQ). A notice of intent to comply with the Industrial Stormwater Permit was submitted to the State Water Resource Control Board (SWRCB) on March 23, 2005, for coverage starting during the 2005-2006 stormwater monitoring season. After CSD formation, HRC will continue to maintain industrial permits for current industrial operations.

Throughout the town of Scotia, there is some commingling of residential and industrial stormwater discharges. However, during the NPDES permit renewal process, it was determined that stormwater discharges from the town of Scotia were not required to be covered under an NPDES permit because the town of Scotia is not currently designated as a regulated Small Municipal Separate Storm Sewer System (Small MS4) by the SWRCB or the RWQCB. The town of Scotia was neither listed on Attachment 2 of the General Municipal Permit, nor designated by the RWQCB or SWRCB after adoption of the General Permit; consequently the Phase II regulations of the Municipal Stormwater Permitting Program do not apply.

The Scotia CSD would not constitute an automatically designated Small MS4 because Scotia does not qualify as an Urbanized Area (an area of population of 50,000 and a population density of 1,000/square mile). At some point in the future, if the SWRCB or the RWQCB chooses to designate the Scotia CSD as a regulated Small MS4, then the CSD would be required to obtain coverage under the General Municipal Permit and comply with the general permit requirements.

### 3.3.3 Implementation Schedule

Proposed stormwater system infrastructure modifications will occur concurrently with proposed water distribution and wastewater collection system improvements. A preliminary capital improvement program being proposed by TOS indicates stormwater drainage system construction starting in 2011 and continuing into 2014.

### 3.3.4 Determination

Upgrades to the existing infrastructure to meet level of service standards will bring the services into compliance with applicable stormwater regulations. With completion of these upgrades, the Scotia CSD will be able to continue providing operation and maintenance of storm drainage systems to the town of Scotia for an additional 20 to 30 years without creating negative impacts on existing levels of service or the environment.

**With completion of the stormwater drainage infrastructure upgrades, the Scotia CSD is an appropriate drainage service provider for the town of Scotia.**

Completion of stormwater facilities upgrades is part of the ongoing maintenance. Upon formation of the Scotia CSD, these facilities will have the capacity to meet levels of service standards and standards of practice normally associated with such services as well as comply with applicable regulatory requirements.

As part of the WWTF upgrades, the electrical controls will be relocated outside the 100-year flood elevation.

**Although there are existing uses located in flood hazard areas within the town of Scotia, the proposed CSD and subdivision would not expose people or structures to significant or new risk from flooding above the existing level of exposure.**

## 3.4 Circulation

### 3.4.1 Existing Level of Service and Improvements

Scotia has a network of arterial and collector streets that provide service to the various neighborhoods. This road system was constructed by PALCO and the California Department of Transportation. Many of the roads were accepted into the County-maintained road system and are maintained by the Humboldt County Public Works Department. In addition to the road system, there are a number of alleys that are used as common access to garages. There are also several privately maintained roads. The County of Humboldt is responsible for maintaining the following streets in the town of Scotia: B Street, Bridge Street, Church Street, Eddy Street, Main Street, Mill Street, North Court, Williams Street, 1$^{st}$ Street, 2$^{nd}$ Street, 3$^{rd}$ Street, 4$^{th}$ Street, 5$^{th}$ Street, and 6$^{th}$ Street. TOS provides maintenance on the remaining streets on an as needed basis.

Main Street is the only street in Scotia classified by the County of Humboldt as a "Collector." Main Street is accessed by way of Northbound U.S. Highway 101 and SH 283. All other roads in Scotia are classified as "Local Roads." Scotia does not have official bike routes, trails, or paths. Many of the streets are unnamed. The streets appear to be in good condition, and residential streets have sidewalks on one side only. There are approximately four marked crosswalks, all of which are centered on the commercial Main Street.

As a result of installation of new wastewater collection, water distribution, and stormwater collection systems, the street system in Scotia will be in need of repair. The Detailed Engineering Analysis (Appendix A) indicates that 75% of existing roadways will require repair. Selected roadways/streets are anticipated to need a 0.2-foot asphalt overlay. Before final pavement overlaying, it is anticipated that preliminary work to address patching, leveling with appropriate base course thickness, and some curb replacement will be needed.

The proposed repairs, as described in the Detailed Engineering Analysis (Appendix A of the MSR) include:

- 0.2-foot overlay of asphalt concrete pavement throughout affected streets;
- patching, leveling with appropriate base course thickness;
- some curb replacement in kind;
- repair to the retaining wall at south end of B Street; and
- safety improvements to address basic signage and stop bars.

Scotia is serviced by the Redwood Transit System, which operates a fixed route service along the US 101 corridor from Trinidad in the north to Scotia in the south. A small population and low ridership limit public transit within Scotia. At present, there is one bus stop at Hoby's Market in Scotia. Regional bus service from Monday to Friday has seven scheduled stops going north: four in the morning and three after noon. Those times are 6:29 a.m., 7:23 a.m., 8:29 a.m., 10:29 a.m., 2:29 p.m., 4:32 p.m., and 6:48 p.m. There are six scheduled stops proceeding south from Hoby's Market. Two are in the morning and four are after noon. Those times are 8:08 a.m., 10:15 a.m., 1:58 p.m., 4:16 p.m., 6:31 p.m., and 7:34 p.m. According to the census population count, 0% commute to work by bus, 14.4% commute to work by carpool, 62.4% commute to work by automobile, and 3.2% work from home (2000 U.S. Census).

### 3.4.2 Scotia Level of Service with Improvements

Upon completion of proposed underground utility construction (includes temporary paving) in each area of Scotia, roadway surfaces will be reconstructed with the final asphalt concrete pavement overlays discussed above. Refer to the Detailed Engineering Analysis (Appendix A) for detail.

The County will continue to be responsible for maintaining B Street, Church Street, Eddy Street, Main Street, Mill Street, 1st Street, 2nd Street, 3rd Street, 4th Street, 5th Street, and 6th Street. The CSD will take over Bridge Street, North Court, and Williams Street, and will be responsible for all other streets.

There will be no change in the public transportation because it is not currently provided by TOS.

According to the Traffic Analysis in Section 7 of the Detailed Engineering Analysis (Appendix A), the proposed rezone and subdivision of the town of Scotia will not have an adverse affect on traffic flow. The current traffic count data and the traffic count data from Caltrans and the Humboldt County Public Works Department attest to the fact that there has been no significant change in traffic flow from 1973 to present. If the subdivision were to incorporate a new population of people who were employed outside the town limits of Scotia, an observable increase in traffic may occur during a.m. and p.m. peak hours at the Junction 283 intersection with Highway 101. However, this slight increase would not significantly affect traffic flows in the area. In addition, the PEIR concluded that the CSD and subdivision would not result in any significant impacts associated with traffic increases, Level Of Service (LOS), roadway geometry (design features), or incompatible land uses affecting emergency access.

Consultant Downey/Brand, Attorneys, LLP, evaluated the issues associated with the provision of pedestrian access as required by the Americans with Disabilities Act (ADA) (see PEIR). Due to the historical resources present in Scotia, any planned changes to existing roads require consultation with the Design Guidelines prepared in support of the PEIR and State Historic Preservation Office to avoid or minimize impacts to historical resources. Ready access is already being met; existing curb ramps are in place. Some additional curb ramps may be required as a result of other work related to the capital improvement project.

The sale of homes will result in an increase in property tax for the County. A fraction of that increase will go to the County for road repair and maintenance. A combination of assessment fees along with TOS's participation to provide raw materials will fund road maintenance for the CSD. The CSD will still be subject to the Humboldt County Public Works road standards, therefore, a change in the LOS that Humboldt County or the CSD can provide is not anticipated. Additionally, no new roads are necessary for subdivision approval or maintaining LOS.

### 3.4.3 Implementation Schedule

The proposed overlay work, being part of the capital improvement plan, is anticipated to begin in 2013 and be completed in 2014. See Appendix B for a detailed schedule.

### 3.4.4 Determination

The Scotia CSD and Humboldt County Public Works Department are able to continue to provide road maintenance to the town of Scotia without altering or creating a negative impact to existing LOS.

**The Scotia CSD is an appropriate road maintenance provider for those roads not maintained by the County for the town of Scotia.** Completion of road/street upgrades is part of relocating public utilities within public rights-of-way. Upon formation of the Scotia CSD, these roads/streets will have the capacity to meet LOS standards and standards of practice normally associated with such services as well as comply with applicable regulatory requirements.

## 3.5 Fire Protection

### 3.5.1 Existing Level of Service and Improvements

The Scotia Volunteer Fire Department (SVFD) is unique in Humboldt County because it is organized as part of TOS rather than a special district. Volunteers for the SVFD are residents of Scotia, and employees of HRC, TOS, or other Scotia businesses. The SVFD has one fire station located at 145 Main Street, roughly in the center of town; provides Emergency Medical Services (EMS) and fire service calls; and operates three water pump engines, two water tenders, and one medical rescue vehicle. The California Department of Forestry and Fire Protection (CDF) provides dispatch services for the SVFD through the Humboldt County Fire Dispatch Cooperative. The SVFD provides service throughout the town of Scotia and has often responded to CDF dispatches to incidents on Highway 101 and as far south as Redcrest. The SVFD has mutual aid agreements with CDF and surrounding fire departments. The SVFD responds to about 45 calls for service per year, approximately 80 percent of which are medically related.

The SVFD has secured outside Workers Compensation Insurance to allow non-company employees to join the fire department. Town residency has also opened up to those not directly related to either company. This has brought some very qualified volunteers to the SVFD. The current SVFD membership consists of 20 volunteers for a population of approximately 860.

The majority of firefighters have attended the Humboldt County Firefighter 1 Academy, which is State-certified. The volunteers are sent to other County-offered trainings (such as, the Humboldt County Firefighter Workshops). The majority is trained to the EMS First Responder level and all are trained in CPR/First Aid and Professional Rescuer Level, which incorporates Automated External Defibrillator with OX Administration certification.

The current fire suppression water supply tank farm is accessible by means of an existing road. The two, 500,000-gallon tanks share a level pad on the north side of the access road, surrounded by a clear zone to keep debris and falling limbs and trees away from the tanks. A 1,000,000-gallon raw (untreated) domestic water tank occupies a pad independent from the fire supply tanks on the south side of the access road. The water tank farm and surrounding land are zoned for timber production and share the setting with second-growth timber.

In addition to filling the two fire suppression water tanks, the fire system also supplies raw water to the cogeneration power plant. A new meter was installed at the power plant in April 2006, and the current estimate of raw water use at the plant totals 354,000 gpd, or approximately 246 gallons per minute (gpm) averaged over a 24-hour period. This represents a baseline demand for the fire system. The system has more than adequate capacity to meet minimum fire flow and duration requirements of 1,500 gpm for 5 hours in residential, commercial, and industrial areas of Scotia in addition to supplying the power plant.

Insurance Services Office, Ltd. (ISO) establishes fire insurance ratings for communities throughout the United States. One of ISO's services is to evaluate the fire suppression delivery systems of fire departments and districts. The result of those reviews is an individual Public Protection Classification (PPC) rating number assigned to the community which the respective fire department protects. The ratings are presented in a rating class structure which ranges from 1 to 10. Class 1 is the highest rating, representing excellent fire protection, and Class 10 is the lowest, meaning the community's fire department did not meet the minimum requirements of the Fire Suppression Rating Schedule and is not recognized by ISO. The PPC is commonly used by insurance providers to establish home and business fire insurance rates. Scotia's most recent PPC was in the 4.9 to 5.9 bracket and has been in this range since 2003. This is a rating similar to the most recent results for the neighboring cities of Fortuna and Rio Dell, while surrounding rural areas have higher (i.e., less desirable) ratings (John Broadstock, personal communication, 2009).

The SVFD also provides basic life support and EMS. Most members are trained to the first responder level with four trained to the Emergency Medical Technician-1 level. City Ambulance of Eureka provides 24-hour advanced life-support and ambulance service to Scotia from its facility located on South Fortuna Boulevard in Fortuna. The service area of City Ambulance is established by the North Coast Emergency Medical Services Authority (NCEMSA) and would not be affected by the CSD and subdivision. The NCEMSA is a joint powers authority created in 1975 to develop a regional EMS system on behalf of its members: Del Norte, Humboldt, Lake, and Trinity counties. The NCEMSA establishes the procedures for the delivery of emergency medical services in Humboldt County and is responsible for emergency medical training program

approval, personnel certification, base hospital and provider designation, quality improvement/ assurance, system coordination, and evaluation.

According to the PEIR, the current water supply system is considered adequate to fulfill the demand on the system without necessary upgrading, and the proposed CSD and subdivision would not cause or create a substantial increase in the existing water demand for the town of Scotia.

### 3.5.2 Scotia Level of Service with Improvements

The SVFD will be organized as part of the CSD, which has enabling powers to oversee fire districts, and would continue to function as a volunteer fire department. No change would result in the capacity of fire protection services to meet current demand. Further, the development of the few vacant parcels that exist will have a negligible impact on the ability to provide the current level of service.

The Scotia CSD would combine elements of existing fire and domestic water systems into a single system owned, operated, and maintained by the Scotia CSD that meets domestic demands and provides fire protection for the proposed service areas (not including industrial areas). The CSD would own the fire storage tanks and HRC would retain ownership of the components of the fire system serving the industrial areas.

Issues associated with operating a fire district under the auspices of the CSD have been evaluated in the financial analysis (Appendix C). The fire district estimated costs include various options for staffing (full time, part time, and volunteer) along with equipment and truck needs. An annual reserve budget of $64,000 is included for the replacement of all fire district operating equipment, gear, and vehicles.

In October 2008, engineers recommended that the two existing 500,000-gallon water tanks used for fire protection be replaced by one new 750,000-gallon concrete water tank (SHN, October 2008). The new tank will best serve the fire protection needs of the town and industrial facilities well into the future, as well as limiting the liability of the CSD. Replacement of the existing tanks is required as appropriate maintenance of the existing fire protection system, and is not a result of the proposed project. This tank replacement will occur even under the no-project alternative.

### 3.5.3 Implementation Schedule

There will be no change in the level of service being provided during SVFD's transition of ownership from TOS to the CSD. TOS owns Water Right License 6373, which authorizes diversion of up to 7.1 cubic feet per second that appears to be adequate for HRC's industrial operations and the residential, commercial, and fire suppression uses. TOS also owns the water intake structure, pumping station, and distribution system. TOS would convey the water right and the diversion works to the CSD.

The SVFD would be merged under the CSD, which has enabling powers to oversee fire districts, and would continue to function as a volunteer fire department. Under a CSD, the SVFD would have a full-time, paid fire chief, whose primary responsibilities would focus on training and recruitment in addition to managing operations supports the current level of service.

### 3.5.4 Determination

The SVFD, under the CSD, will be able to provide fire protection services and basic life support without altering the level of service or becoming a burden to the ratepayers. Having all of the town's basic services under one management entity would provide efficiencies in operation, elected directors, and be responsive and responsible to local needs and concerns. Alternatives such as a separate fire district would add another layer of government that would operate separately from the CSD, which could affect efficiencies.

**The SVFD, merged under the Scotia CSD, is an appropriate fire protection service provider for the town of Scotia.** Upon formation of the Scotia CSD, the SVFD will have the capacity to meet levels of service standards and standards of practice normally associated with fire protection services as well as comply with applicable regulatory requirements.

## 3.6 Power

### 3.6.1 Existing Level of Service and Improvements

TOS currently provides all electric power to Scotia, with a 32.5-megawatt biomass-powered cogeneration plant (combined heat and power). TOS owns the power distribution system within Scotia, including the poles, conductors, transformers, and meters. TOS sells power developed from wood waste from HRC milling operations, to PG&E to produce electricity to run the manufacturing facilities and to light homes and businesses in Scotia, and is considered a "qualifying facility" (which is defined as a small power producer that meets the federal Public Utility Regulatory Policies Act of 1978 guidelines and qualifies to supply generating capacity to electric utilities, which must purchase this power at a price approved by the California Public Utility Commission [CPUC]). Some of the TOS-owned power poles are joint poles containing telephone facilities owned by AT&T and coaxial cable facilities owned by Suddenlink (formerly Cox Communications). TOS establishes its own rates and charges for providing electric service to its customers (SHN, September 2007).

Currently, TOS provides electrical power, on its own grid, to the town of Scotia with 13.8 kilovolt (kV) service supply. Subject to the change from TOS ownership of Scotia to private, multiple ownership, the electrical supply and distribution will be transferred to PG&E. The new PG&E service supply will be 12 kV.

PG&E has inventoried and studied the existing TOS electrical system in Scotia, and has provided TOS with several options for the transfer of services, none of which alter the level of service currently being received. Each alternative combines the electrical, telecommunication, and cable lines and requires decommissioning selected light poles, installing new power/light poles, and relocating portions of the transmission line underground. Very few original poles exist in Scotia. The majority of changes are located in the residential and commercial areas with few in the industrial area.

### 3.6.2 Scotia Level of Service with Improvements

Prior to transfer of the existing electric distribution system responsibility, PG&E is requiring electric facility improvements, in order to meet the minimum CPUC safety and reliability requirements, as PG&E is regulated by the CPUC (SHN, September 2007).

TOS maintains Scotia's streetlights. Ownership of electrical utilities will be transferred to PG&E. Very few original poles exist in Scotia. PG&E is looking at alternatives that will combine the electrical, telecommunication, and cable lines. That action may require decommissioning selected light poles, installing new power/light poles, and relocating portions of the transmission line underground.

### 3.6.3 Implementation Schedule

PG&E is currently moving ahead with making changes to the existing electrical system.

### 3.6.4 Determination

PG&E currently provides electric power supply and distribution to incorporated and unincorporated areas of Humboldt County. PG&E will incorporate existing power supply and distribution systems into its regional operation without creating a negative impact on existing levels of service.

**TOS or a subsequent company will operate the cogeneration plant and sell the power to PG&E. PG&E is the only viable option to provide electric power distribution and maintenance to the town of Scotia.**

## 3.7 Parks and Recreation

### 3.7.1 Existing Level of Service and Improvements

Scotia is one of the most walkable towns in Humboldt County, and features generous green spaces and landscaped areas. Scotia's recreation facilities include a community park, one baseball field, and one soccer field. Fireman's Park, also known as Scotia Park, is the town's community park, and there is an indoor recreation center. Fireman's Park is a fenced park with redwood trees, picnic tables, and barbeque pits. The park's proximity to the Eel River and the ball fields makes it convenient to a large number of users, primarily Scotia residents and visitors. The baseball field, known as Carpenter's Field, is a fenced baseball field with bleachers, located opposite Fireman's Park. A grass, fenced soccer field (known as Slaughterhouse Field) is located north of the Fireman's Park. Together, the baseball field, Fireman's Park, and soccer field form the core recreation area for Scotia.

Scotia landscaped areas include "pocket parks" adjacent to the Scotia Museum near the corner of Main Street and B Street and by the HRC timber sales office on Main Street.

The Recreation Center complex adjunct to the Stanwood A. Murphy Elementary School, located at the east end of Mill Street, is another component of Scotia's recreation facilities. The Recreation Center is a large building, approximately two-stories in height, with an indoor pool at its south end; it was recently sold to the Scotia Union School District (APN 205-351-020). The Recreation Center includes a basketball court, racquetball court, weight room and cardiovascular room, and locker rooms. The former Industrial Rehabilitation Center is located in a portable building south of the pool and is part of the facilities acquired by the Scotia Union School District, which plans to operate it as a gymnasium and recreation facility.

TOS currently manages and administers Scotia's park and recreation facilities, including structure maintenance, trash pickup, lawn mowing, park gardens maintenance, landscaping, fencing, watering, and schedule administration for the recreation facilities

Landscaping and landscape maintenance in Scotia is provided by TOS. Landscaping and maintenance areas include roadside areas such as Main Street, the downtown commercial area, streetscapes, building setback areas, residential areas, and some industrial areas.

### 3.7.2 Scotia Level of Service with Improvements

The CSD will be responsible for the same duties that TOS currently manages and administers. Under the CSD, the level of service for parks and recreation would be substantially similar to that currently found in Scotia. As a public entity, the CSD would be eligible for state and federal funding for improvements.

### 3.7.3 Determination

The subdivision will not result in an increase in population or increase in demand for park and recreation facilities. No new park and recreation facilities, or new maintenance of such facilities, will be required.

**The CSD is an appropriate agency to continue the operation and maintenance of Scotia's park and recreation facilities including public landscaped areas.** Upon formation of the Scotia CSD, parks and landscape open spaces will continue to be operated and maintained by the CSD and will have the capacity to meet levels of service standards and standards of practice normally associated with park, recreation, and open space as well as comply with applicable regulatory requirements. Existing parks and landscaped open spaces are considered as "contributing resources" to the town's eligibility for historic district status. Any changes and improvements to park and public open spaces will be subject to design guidelines and design review.

## 3.8 Law Enforcement

### 3.8.1 Existing Level of Service and Improvements

The Humboldt County Sheriff provides law enforcement for Scotia. Scotia is included in the south patrol beat, which extends from Humboldt Hill south to Redcrest. In addition, PALCO formerly provided and HRC currently provides private security services for their offices and industrial facilities in the town of Scotia (7 days a week, 24 hours a day). The focus of these services is primarily to provide security related to the industrial and logging operations; they provide no law enforcement. Law enforcement services in Scotia are on par with neighboring areas of Humboldt County and are adequate for the demand.

### 3.8.2 Scotia Level of Service with Improvements

Under CSD formation, the Humboldt County Sheriff would continue to provide law enforcement for Scotia. HRC would continue to provide security to HRC-owned industrial and commercial properties. Because the size of Scotia is not changing, and only a few undeveloped parcels exist, no change would occur in the capacity of public services to meet current demand.

### 3.8.3 Determination

**The formation of the CSD and the subdivision will not result in an increase in population or increase in demand for law enforcement services.**

## 3.9 Other Services Not Changing

### 3.9.1 Telecommunications

AT&T (formerly SBC Communications) is regulated by the CPUC and provides a full range of telephone service to businesses and residences in the Town of Scotia. AT&T operates a central office for Scotia telephone service located on Sequoia Street in Rio Dell. AT&T owns its facilities within Scotia; however, some AT&T facilities are attached to TOS-owned utility poles (SHN, September 2007). Telecommunication services in Scotia are on par with neighboring areas of Humboldt County and are adequate for the demand.

As part of the transfer of electrical services from TOS to PG&E, the telecommunication (provided AT&T Communication) and cable lines (provided by Suddenlink) requires decommissioning selected light poles, installing of new power/light poles, and relocating portions of the transmission line underground. This service will not be interrupted or changed when a CSD is formed, or under the annexation or HOA alternatives.

**Determination: The formation of the CSD and the subdivision will not result in an increase in population or increase in demand for telecommunication services.**

### 3.9.2 Natural Gas

Scotia is the most southern Humboldt County community served by PG&E natural gas facilities. PG&E owns and operates the natural gas distribution network in Scotia and all users are individually metered (SHN, September 2007). Natural gas services in Scotia are on par with neighboring areas of Humboldt County and are adequate for the demand.

Several commercial buildings and approximately 9 residential buildings used steam and are being converted to natural gas, fed by the existing PG&E main line; the conversion is almost complete at the time of this writing and is not part of the proposed project. Natural gas service will not be interrupted or changed as a result of CSD formation, or under the annexation or HOA alternatives.

**Determination: The formation of the CSD and the subdivision will not result in an increase in population or increase in demand for natural gas supply.**

### 3.9.3 Cable

Suddenlink provides cable television and broadband Internet service to residents of Scotia. Suddenlink owns its cable facilities within Scotia, which are located on joint utility poles. Although AT&T owns and operates a fiber optic line in Scotia, TOS owns its own fiber optic telecommunications facilities that distribute broadband communications services to certain TOS offices within Scotia. These are customer-owned facilities and are not regulated by the CPUC. Cable services in Scotia are on par with neighboring areas of Humboldt County and are adequate for the demand.

As part of the transfer of electrical services from TOS to PG&E, the telecommunication (provided by AT&T Communication) and cable lines (provided by Suddenlink) require decommissioning selected light poles, installing new power/light poles, and relocating portions of the transmission line underground. This service

will not be interrupted or changed as a result of CSD formation, or under the annexation or HOA alternatives.

**Determination: The formation of the CSD and the subdivision will not result in an increase in population or increase in demand for cable services.**

### 3.9.4 Solid Waste

Solid waste collection and disposal is provided by Eel River Disposal & Resource Recovery, a privately owned firm. According to Eel River staff, the quantity of solid waste collected in Scotia is not accounted for separately from other unincorporated areas; one truck provides collection in residential areas once a week, and other waste is collected at the Fortuna transfer station and various drop-off locations in the area (Karen Smith, personal communication). Typical residential waste generation rates are on the order of 0.44 tons per person per year in Humboldt County (California Integrated Waste Management Board, 2007), which corresponds to approximately 375 tons of waste per year for Scotia.

Scotia is within the County jurisdiction and the County is a member of the Humboldt Waste Management Authority. Scotia solid waste is disposed at the transfer station in Eureka. From there, the waste is transported by truck to existing, permitted disposal facilities, either Anderson Solid Waste Disposal Site in Shasta County, California or Dry Creek Landfill near Medford, Oregon. Waste management services in Scotia are on par with neighboring areas of Humboldt County and are adequate for the demand.

This service will not be interrupted or changed as a result of CSD formation, or under the annexation or HOA alternatives. Waste collection, recycling, and disposal services will continue to be provided by Eel River Disposal & Resource Recovery.

**Determination: The formation of the CSD and the subdivision will not result in an increase in population or increase in demand for waste management services.**

# Chapter 4. Finances and Rate Structure

This chapter draws on information provided in the financial analysis, which discusses expected revenues and expenditures for the proposed CSD formation (Appendix C). The financial analysis includes financial information from a number of sources including representations of similar operations in neighboring communities and service districts, engineering studies, interviews of County officials, and recent TOS and PALCO financial statements.

## 4.1 CSD Formation

Ongoing O&M costs for the Scotia CSD will be financed using a combination of resources. These will include at a minimum reallocation of a portion of property taxes from the County and user fees. Other operational sources that could be considered include benefit assessments, impact fees, and special taxes implemented by the CSD's Board of Directors.

### 4.1.1 Capital Finance Plan

The Capital Finance Plan discussed in the financial analysis outlines a financial proposal for the future CSD to finance the infrastructure upgrades specified in the detailed engineering analysis through debt financing. The plan comprises a short-term component, covering the first few years of transition and operation, and a long-term component.

For the **short-term financing**—up to six years—a $12.7 million Tax Assessment Bond (TAB) will be issued, payable from tax assessments levied on the current property owner (TOS) and the sale of improved parcels and homes. Full repayment will be from TOS through the sale of properties, not from the residents and new homeowners of the Scotia CSD. This short-term financing will provide the funding for the improvements as described in the Detailed Engineering Analysis (Appendix A). The completed facilities are anticipated to have substantial working life with no projected major capital improvement costs for the next 20 years.

For the **long-term financing**, a $5 million low-interest water and sewer loan or bond will be issued by the time the TAB has been fully repaid. This financing will be repaid from the new property owners' monthly user fees. The three most likely options for long-term, low-interest funding are the State Clean Water Revolving Loan Fund program, the U.S Department of Agriculture Rural Development's Rural Utilities Services loan program, and the California Special Districts Association's pooled bond program (Pooled Transaction Certificates of Participation).

The Capital Finance Plan will not result in extraordinary expenses for Scotia residents and will allow the CSD to be self-sufficient.

### 4.1.2 Anticipated Revenues

Revenues for financing the ongoing operations of the proposed CSD will come from an assessment of user fees for each of the services and, it is proposed, an allocated share of property taxes from the County of Humboldt.

The primary source of revenue for CSD O&M is associated with traditional monthly user fees. The basis for the projections contained in the Financial Analysis is predicated on a user-based system as it is measured by Equivalent Dwelling Unit (EDU). Rates were estimated based on the typical anticipated monthly usage of water, wastewater, storm drainage, parks, streets, and fire protection costs for O&M for a typical household, and are presented in Table 4-1. Data was analyzed from existing meter operations to determine likely industrial usage for water and wastewater. The Financial Analysis (Appendix C) projects the anticipated expenditures for the first years of operations associated with the provision of these services.

For determining revenue generation associated with the CSD, the average single-family residence is assigned one EDU. All other customers are assigned a proportionate number of EDUs based on use in each service area, and charged accordingly. The annual revenue requirement for funding the various services and programs is divided by the estimated number of EDUs in the CSD to determine the per-EDU rate needed to generate the funds.

The proposed monthly user fees per EDU and associated with each of the services to be provided by the CSD are presented in Table 4-1. (Note: Table 4-1 is based on the possibility that the CSD might receive no tax share allocation from the County and, therefore, represents the most conservative scenario. See Appendix C, Financial Analysis, for a discussion of other scenarios.)

**Table 4-1**

**Proposed Monthly User Fees by Year Five, Including Recommended Reserve/Replacement Fund**

**TOS[1] Municipal Service Review**

| Service | Cost per EDU[2] |
|---|---|
| Water Supply | $ 42.50 |
| Wastewater Collection, Treatment and Disposal | $ 78.29 |
| Road Maintenance and Street Lighting | $ 22.85 |
| Stormwater Drainage | $ 21.55 |
| Parks and Recreation | $ 7.29 |
| Fire Protection | $ 11.51 |
| TOTAL | $184.00 |

1. TOS: Town of Scotia, LLC.
2. EDU: Equivalent Dwelling Unit

This table is based on a possible zero-percent tax share allocation from Humboldt County. The Water Supply line item includes a debt service of $12.72, and the Wastewater Collection line item includes a debt service of $17.50.

Once formed, the CSD should be entitled to an allocation of property taxes from a portion of those received by Humboldt County. The amount of allocation is not pre-determined and will be subject to negotiations with the County. Unlike incorporated cities, the CSD will not receive any sales tax, transient occupancy tax, or gas tax revenue from the County upon its formation.

The CSD will receive a yet to be negotiated allocation from revenues received by the County from an established property tax assessment. In future years, the Scotia CSD would receive an increase in its tax allocation share as the sale of the existing homes in Scotia occurs. The increase in property tax values is predicated on the sale of the majority of Scotia's single-family residences in the first five years of CSD operations. The resale and subsequent tax reassessment by the County Assessor will generate a sizable increase in Scotia's tax base. The current average assessed residential property value is $31,400. The average estimated resale market value of Scotia's houses ranges from $175,000 to $225,000, which will result in an increase in assessed value ranging from $143,600 to $193,600.

### 4.1.3 Anticipated Expenditures

Limited population growth is expected in Scotia due to the lack of available vacant land, substandard lot sizes that cannot support additions under County requirements, and physical restrictions; current industrial uses are expected to remain the same. The WWTF is expected to have sufficient capacity to serve the newly created residential and commercial lots. The subdivision and formation of a CSD will not result in any need to increase capacity of the WWTF. There is an adequate water supply to sustain ongoing and future industrial operations.

Expenditures for the CSD include personnel services, materials and services, capital expenditures, and debt service. A breakdown of monthly costs associated with each service (water, wastewater, streets and lighting, stormwater, parks, and fire protection services) is provided in the Financial Analysis. A separate table is included with staffing needed and estimated CSD start-up costs for office and equipment. An operating reserve contingency fund of $135,000 is included from the start of the CSD's operation in order to cover unanticipated or emergency costs.

Personnel services in the budget include a district manager, clerk, fire chief, WWTF field manager/operator, WTF operator/lead foreman, and two utility workers.

The financial analysis projects an estimated annual debt service related to long-term financing of approximately $200,000 per year or the equivalent of $30.22/month per EDU by Year Five.

### 4.1.4 Affordability

Affordability to residents and future homeowners of Scotia is an important consideration and was the object of extensive review. However, the new CSD would provide services not typically available from other service districts or not funded through user fees, such as road maintenance and street lighting, stormwater drainage, parks and recreation, or fire protection services; this makes it difficult to compare to other service providers. The more frequently used and available points of comparison for user fees are those assessed for water and wastewater services.

A commonly recognized benchmark for determining the affordability of the cost for water and sewer services has been established by EPA. That benchmark is based upon the Annual Median Household Income (AMHI) of the affected area and defines the affordability range from 1.5 to 2.0% of the AMHI. In the case of Scotia, the AMHI for Humboldt County is used. The EPA defined benchmark for affordable water and sewer rates combined is in the range of $113 to $150 per month per EDU. The proposed operating budget projects an EDU rate for both water and sewer of approximately $121/month by Year Five of the CSD's existence (based on a 0% tax allocation), which falls within the acceptable bracket.

The long-term debt financing by the CSD is projected to net $5 million, which will be applied toward the capital project costs, and is expected to incur an annual debt service of approximately $200,000 per year. This equates to about $30.22/month per EDU. This long-term bond financing debt repayment of $30.22/month per EDU is comparable to bond fees that could be levied under the Mello-Roos bond financing. The Mello-Roos Community Facilities Act of 1978 enables cities, counties, special districts, and school districts to establish Community Facilities Districts (CFDs) and to levy special taxes to fund a wide variety of facilities and services. As a point of comparison, the monthly Mello-Roos bond levy per parcel for community infrastructure improvements in the Roseville Woodcreek West Community Facilities District is $90.

## 4.2 Determination

The projected Scotia CSD water and wastewater user fees are comparable to other similar service providers in northern California and will be within the range of EPA's limits of affordability. User fees for other services were reasonable considering the range of services to be provided by the CSD.

These user fees and a reasonable allocation from property taxes, to be negotiated with the County, will provide the necessary revenues to match the anticipated expenses resulting from personnel services, materials and services, capital expenditures, and debt service.

**Under a CSD structure, Scotia will be able to collect sufficient revenues to cover its anticipated expenses while charging user fees, assessing taxes, and assuming debt at rates comparable to similar communities in Humboldt County.**

# Chapter 5. Cost Avoidance Opportunities and Shared Facilities Opportunities

## 5.1 CSD Formation

When considering cost centers for services provided by the CSD or a city, typical costs include expenditures associated with O&M, capital expenditures, debt service, and annual contributions to funding future capital replacement. The primary area for exercising savings due to economies of scale is associated with O&M. Upon reviewing projected line item expenditures, economies of scale could be pursued in such areas as bonds, dues, publications, general supplies, general maintenance and repair, insurance, and contracted maintenance services.

The Scotia CSD will be assuming management and operations for wastewater treatment, water supply, stormwater drainage, road maintenance and street lighting, fire protection, and landscape maintenance, and will be assisted in cost-reducing strategies by the following measures:

- The ability to purchase goods and services through joint purchasing programs as available through Humboldt County and the State Community Services District Association.
- Avoid the leasing costs associated with locating a CSD office building by using office space for the CSD and SVFD in the existing SVFD operations building in Scotia at no cost. The joint use of space between the SVFD and CSD should lead to economies of scale for operational costs, utilities costs, and maintenance.
- By co-locating the SVFD and other CSD operations, all local utilities for Scotia residents will reside in the same facility. This can promote the efficiency in the provision of all CSD services with all administrative and billing services functionally operating in the same building. Additionally, space to conduct public meetings is available at this facility.
- The CSD administrative staff could provide assistance to the SVFD staff in various administrative and billing notifications, as needed. This administrative assistance could lead to lower SVFD overhead operational costs.
- With absorption into the Scotia CSD, the SVFD will be able to expand on its record of service coordination with the County of Humboldt and the City of Rio Dell Fire Protection District for mutual response to emergencies and technical coordination of local needs.
- The CSD could also reach an agreement with the Scotia Union School District for the use of joint meeting facilities.
- By providing an operational location for local park services in the CSD offices, the parks programs will be more effectively managed and could become eligible for available capital improvement grants and program support through area non-profit programs.

- The Scotia CSD, by virtue of the transfer of water rights, will acquire available water resources and be able to retain the existing water collection system and pumping station facilities. Therefore, it will be able to provide a cost-effective water resource for its users and will not need to rely on any other area provider.

- The County of Humboldt will continue to provide ongoing maintenance services for the main thoroughfare through Scotia as well as several adjacent streets. The Scotia CSD will assume the annual O&M for other local streets, thereby relieving the County of Humboldt of this potential service issue.

- The annual budget for the Scotia CSD will implement a capital reserve fund in order to prudently budget for long-term capital equipment and facility replacement costs. This will provide CSD customers with the ability to maintain service rates at reasonable levels in the future.

- The proposed CSD will provide for those typical municipal services outlined within the proposed boundary that have been in existence and provided privately for many years. The proposed CSD will assume governance of the pre-defined service in an area that has been established for a considerable time with no known gaps adjacent to or within the boundaries or any duplication of services with other providers in the area.

Major services that are currently and will continue to be provided by and contracted out to private providers include:

- Solid waste collection and disposal
- Roadway maintenance
- Cable
- Natural gas
- Telecommunications

## 5.2 Determination

The Scotia CSD will be able to coordinate its level of services to its customers by offering a reasonable level of cost avoidance options, including joint-use facility for operations and meetings, purchasing cost-savings options, consolidated billing services, use of local volunteers, and using the latest in technology in equipment and office work procedures.

The CSD formation does not preclude future opportunities for additional combined operations or facilities, if such opportunities arise.

**There are opportunities available to provide shared costs with the SVFD in terms of administrative assistance, billing services, and joint use of community meeting facilities. Additionally, the CSD is in a position to provide cost-effective water and wastewater functions to its users.**

# Chapter 6. Evaluation of Management Efficiencies

## 6.1 CSD Formation

The Scotia CSD will operate under generally accepted accounting practices and policies regarding the adoption of an annual budget and monthly billing statements sent to customers. The CSD will retain an outside auditor to provide annual review of the practices and accounting records maintained by the CSDs' administrative staff.

The CSD's adopted annual budget will be an indicator of the organization's management capabilities. The CSD's projected first-year budget is essentially a break-even operation-cost-to-revenue-received budget. In order to ensure a balanced program budget, there is an operational reserve of $150,000 per year established in the CSD's initial five-year budgetary plan. The CSD will include eight full-time positions for the day-to-day operations. Some necessary but less frequent or more specialized district functions will be handled through outside contracting for services.

For hiring purposes, preference will be given, in decreasing order of preference, to employees already providing these or similar services for TOS, HRC, or other local businesses; other existing employees of TOS, HRC, or other local businesses; current residents of Scotia; other residents of Humboldt County; and newcomers. Regardless, all candidates will have to meet pre-established competence and experience requirements.

Improvements are planned for the wastewater facilities, water distribution system, and stormwater drainage system. The CSD will also maintain and operate Scotia's existing ball fields and parks program, provide road maintenance and street lighting, and fire protection.

The Scotia CSD will initiate those measures outlined in Chapter 5 in order to avoid duplication of service and attempt to achieve economies of scale in the provision of services to its customers. Upon creation of the Scotia CSD, the service area of Scotia will also be served by private providers (PG&E for power and natural gas, Eel River Disposal and Resource Recovery Inc. for waste collection, and AT&T and Suddenlink for telecommunications and cable services), and by the County (law enforcement and maintenance of certain roads). There are no apparent management deficiencies relative to coordination or oversight of these services as provided by outside agencies.

## 6.2 Determination

The Scotia CSD Capital Improvement Program (CIP) will provide the CSD's overall management, contract with outside providers for services as needed, and an operating reserve to cover unanticipated costs.

**Through its planned CIP and structure, the Scotia CSD will provide necessary services and maintain operations in an efficient and cost-effective manner. Management efficiencies will be possible through combining administrative and management functions of the CSD and the SVFD, including clerical, accounting, purchasing, operation, and maintenance.**

# Chapter 7. Local Governance and Accountability

## 7.1 CSD Formation

CSDs are granted powers by the State of California, pursuant to Section 61000 of the California Government Code, to carry out the functions designated in the petition for formation and any additional services approved by the board of directors and district voters. Services to be provided by the Scotia CSD include wastewater collection and treatment, water supply, storm drainage, street lighting, parks, recreation, open space, road maintenance, landscape maintenance within public rights-of-way, and fire protection.

The proposed CSD will be governed by a legislative body known as a board of directors, which will meet at least once every three months. The board will establish policies for operation of the CSD and appoint a general manager, who will have responsibility for implementation of those policies. The CSD will establish an alternate depository pursuant to the CSD Law and will appoint a CSD treasurer to serve in the place of the county treasurer. The Scotia CSD Board of Directors will oversee the staff and management of infrastructure for the provision of services.

The CSD board of directors will have five at-large members, each of which will be elected from, and by voters of, the CSD as a whole. The initial election of board members will occur contemporaneously with the election to confirm formation of the CSD, and it will be held by Humboldt County generally pursuant to the Uniform District Election Law. The procedures for the election of the initial board are put in place as a part of formation of the CSD itself. That is, when the LAFCo approves the CSD, the LAFCo's approval resolution would contain both a statement as to when the formation is to be effective, but also a requirement for election of the board; presumably this would be concurrent with a formation election for the CSD. Once elected, the board members must meet within 45 days of the effective date of the formation of the CSD. In order to establish staggered terms of service, at this meeting they would divide themselves into two classes by lot, one consisting of three members and the other consisting of two members. Those in the three-member class have four-year terms, and those in the two-member class have two-year terms. Subsequent terms of all board members will be four years.

For the one-year transition period leading up to the election of the board of directors, an interim CSD director will be appointed by TOS.

## 7.2 Determination

**The CSD will have the ability to make information available to the public and comply with the Brown Act.**

The CSD will be governed by a board of directors elected by residents within the CSD boundary under the direction of Humboldt County pursuant to the Uniform District Election Law. As elected officials, members of the CSD board of directors will be subject to the provisions of the Brown Act per meetings and decision-making open to the public. Accountability will occur through compliance with election and open meetings laws and voter approval of any fees or taxes proposed by the board of directors.

# Chapter 8. Government Structure

It is unusual, nowadays, for a private entity to provide the range and types of public services currently provided by TOS. Services like water supply, wastewater treatment, road maintenance and street lighting, stormwater drainage, parks and recreation, and fire protection are considered to be of public concern and are typically provided by public entities such as counties, cities, service districts, public utilities districts, etc. for the public good.

## 8.1 CSD Formation

CSDs are granted powers by the State of California, pursuant to section 6100 of California Government Code, to carry out the functions designated in the petition for formation and any additional services approved by the board of directors and CSD voters. Services to be provided by the Scotia CSD include: wastewater, water, stormwater drainage, street lighting, parks and recreation, road maintenance, landscape maintenance within public rights-of-way, and fire protection.

The CSD is proposed to operate through direction of a five-member board of directors elected by the general population served by the CSD. The CSD will include seven full-time positions including a CSD manager, a city clerk, a fire chief, a field manager for the WWTF, a lead foreman for the WTF, and two utility service workers. Day-to-day operations will be carried out by paid and volunteer (firefighters), who will most likely be organized by service department and managed/administered by an overall general manager. Other necessary district functions (such as legal, accounting/auditing, and engineering services) will be handled through outside contracting for services. An example of an organization chart for the CSD is represented on the next page.

For the one-year transition period leading up to the election of the board of directors, an interim CSD director will be appointed by TOS.

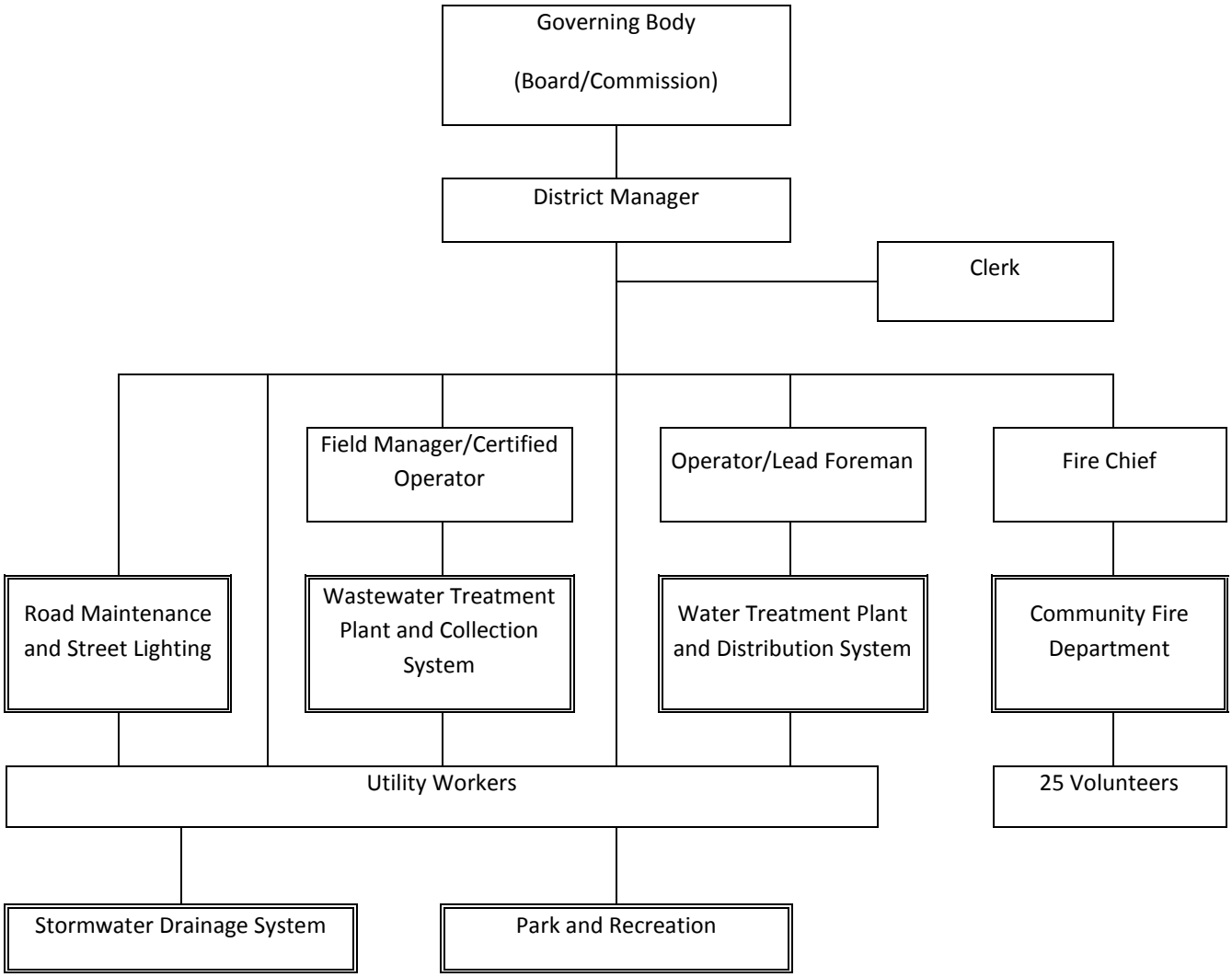
The CSD and the SVFD will both use the fire house for offices and equipment storage. A public facility, not yet chosen at this time, will hold the monthly public meetings. The CSD will provide public notice in a generally circulated newspaper of its regularly scheduled meetings and also post a copy of their meeting agenda at the CSD's office location. Copies of the agenda may be requested by the public by phone request, facsimile, or mail.

## 8.2 Determination

Opportunities for other service providers are limited by the rural setting and topography that surround Scotia; therefore, the boundaries determined for the Scotia CSD are logical and orderly. **The CSD will be able to provide the necessary services to Scotia at a suitable level with a simple, well-established structure.**

Governance under the CSD will continue to focus on Scotia as a distinct community, with a timber heritage and will continue to work cooperatively with HRC as operators of ongoing timber production facilities. The responsibilities of the CSD would be to improve, operate, and maintain its existing water, wastewater, and stormwater facilities.

## Organization Chart




## Legend

| Responsibilities/Services |
|---|
| Road Maintenance and Street Lighting |
| Wastewater Treatment Plant and Collection System |
| Water Treatment Plant and Distribution System |
| Community Fire Department |
| Stormwater Drainage System |
| Park and Recreation |

| Personnel |
|---|
| District Manager |
| Clerk |
| Field Manager/Operator |
| Operator/Lead Foreman |
| Fire Chief |
| Utility Workers (2) |

# Chapter 9. Sphere of Influence

## 9.1 Scotia's "Sphere of Influence"

A "Sphere of Influence" is defined as a "plan for the probable physical boundaries and service area of a local government agency as determined by the Commission," such as a city or special district: (sections 56076 and 56425 of the California Government Code).

### 1) The Present and Planned Land Uses In The Area, Including but Not Limited To, Residential, Commercial, Industrial Development, and Agricultural and Open Space Lands

The town of Scotia is located on a flat river terrace, surrounded by steep forested slopes and the Eel river floodplain. Scotia is a developed town that once the subdivision is approved will only include five vacant parcels. Existing land uses include a mix of commercial, residential, industrial/timber production, public facilities (after the transfer from TOS ownership to the CSD), and recreational uses. As discussed in the CSD and subdivision PEIR, a General Plan amendment is proposed that would make land use designations consistent with the actual uses that have occurred in the town of Scotia for the last 100 years. No new uses are proposed for the Town of Scotia or adjacent areas. Any future changes to the land use designations in Scotia will be processed through the Planning and Building Divisions of the Community Development Services Department of Humboldt County.

Scotia, which was originally known as Forestville, was founded in 1882. The present land uses within the Town of Scotia include industrial/timber production, commercial, residential, and public facilities (such as, parks, ball fields, and landscaped open space). Proposed amendments to the Humboldt County General Plan and zoning code will essentially bring the land use designations of the General Plan and land uses allowed in the underlying zoning in compliance with what already exists on the ground. Scotia is essentially "built out." No new uses are proposed within the boundaries of the proposed CSD or the industrial areas to be operated by HRC. Any future changes to the land use designations in Scotia would require additional amendments to the General Plan and zoning code and would be administer by the Planning Division of the Community Development Services Department of Humboldt County. The proposed CSD boundary is surrounded on the south, east, and west by HRC timberland, and on the north by the City of Rio Dell (separated by the Eel River).

### 2) The Present and probable need for public facilities and Services In The Area

TOS was formed as a result of the Plan of Reorganization submitted by the secured creditor (Marathon), joined by MRC, and confirmed by the Bankruptcy court. Pursuant to that plan, the entirety of the town of Scotia and its real and personal assets transferred to TOS, the reorganized entity.

An application has been filed with Humboldt County to subdivide the town of Scotia in order to be able to sell the residential and commercial lots and buildings. The subdivision requires a General Plan amendment and rezoning classification, along with transfer of some of the public utilities and services to other entities, most of which are currently provided by TOS.

The public services and utilities currently managed by TOS will be transferred to a CSD in support of the subdivision include water, wastewater, stormwater, fire protection, road and park maintenance. The electrical distribution system will be transferred to PG&E. Roads not currently maintained by the County will be maintained by the CSD. TOS or a subsequent company operate the co-generation plant and sell power to PG&E. The County Sheriff's Office will continue to provide law enforcement services. Other utilities such as telephone, cable, natural gas, and solid waste collection would remain under current private providers. The CSD would be administered by an elected board of directors, which would hire staff, oversee budgets, hold public meetings, and basically be in charge of future upgrades, O&M of water, wastewater, stormwater, road maintenance and street lighting, fire protection, and park and recreation facilities. No new public facilities and services will be required.

### 3) The Present Capacity of Public Facilities and Adequacy of Public Services That The Agency Provides or is Authorized To Provide

TOS currently provides wastewater, water, stormwater drainage, road maintenance, fire protection, EMS (basic life support), electric power, parks and recreation, landscaping and landscape maintenance, and street lighting services. The County of Humboldt provides other public services, such as law enforcement, land use regulation, county-maintained roads, social services, and general government services.

The newly formed Scotia CSD will need one or more funding sources in order to ensure the orderly transfer and provision of public services. A financial analysis of expected revenues and expenditures was prepared in order to evaluate the CSD's ability to be self-sufficient (Appendix A). The financial analysis lays out a financially conservative plan analyzing the CSD's forecasted revenues and expenses. Operation of the CSD would be funded through a mix of property tax allocation (negotiated with Humboldt County) and user fees. Expenses would include personnel services, material and services, capital expenditures, and debt service. The capital improvement plan described above would be funded through a combination of short-term and long-term bonds. User fees as projected are adequate to provide for the ongoing operation and maintenance of all infrastructure systems, along with a set-aside of annual funds for deposit into a long-term replacement fund for major repairs and improvements.

Evolving regulatory changes and unknown future commercial and industrial demands will dictate infrastructure capital improvement expenditures as these changes are planned and implemented. Therefore, existing system upgrades or modifications will be planned and constructed for maintaining appropriate levels of service while minimizing operation and maintenance costs to the effected users. All described public service components will be designed and constructed to meet or exceed standard-of-care for similar public works facilities in the local area or as noted in the following specific system sections.

All existing public services and utilities currently provided by TOS are considered to be fully functional. All TOS-provided services to Scotia are in technical compliance with the appropriate regulatory oversight agencies. The proposed infrastructure improvements will be comparable to system needs for a town similar in size and character to Scotia. Overall, the services currently provided by TOS meet level of service standards, with the exception of the domestic water line distribution system (distribution pipes 3 inches in diameter or less that are in need of upsizing and repair). The improvements as detailed in the Detailed Engineering Analysis (Appendix A) will be financed by TOS and a combination of increased tax revenue from

property sales and the issuance of bonds by the CSD, as necessary. These measures will ensure that the systems' operations will not become a long-term financial burden to the ratepayers.

The public services and utilities currently provided by TOS have been reviewed and can be accomplished with the establishment of a CSD board of directors and staff. The current level of services provided to Scotia can be characterized as "comparable to other similarly sized, local municipally incorporated communities." The level of maintenance to residential, commercial, industrial, and recreational facilities has been sustained over many years, since the town was constructed. As with any infrastructure system, there will be ongoing maintenance and upgrades needed to continue the level of service desired by area residents and required regulatory agencies. Scotia's CSD will be responsible for ensuring that these services are continuously provided and are in compliance with applicable County and State regulations.

**4) The Existence of Social and Economic Interdependence and Interaction Between the Area Within the Boundaries of a Local Governmental Agency and the Area That Surrounds It and That Could Be Considered Within the Agency's Sphere of Influence**

Social and economic interdependence between the town of Scotia and the ongoing timber production operations of HRC will continue. Although the role of HRC will change from owner to neighbor, HRC's commitment to the town's future will continue to be important during the transition period from TOS to CSD, as well as in the future as a major employer in Scotia. Scotia's relationship with the City of Rio Dell will also continue as a cooperative neighbor where families and friends live in both communities, people live in one and work in the other, and cooperation occurs in areas such as fire protection. The surrounding timber land will continue to be managed for harvest and will be among the sources of timber for production at the HRC mill.

**5) The Maximum Possible Service Area of the Agency Based Upon Present and Future Service Capabilities of the Agency**

Scotia is essentially built-out. Very little growth is feasible due to limited available space, lots sizes, and the scarcity of vacant lots. In addition, there are physical restraints to development outside of the proposed boundaries. The town of Scotia is located adjacent to the City of Rio Dell. Scotia is bound to the east by Highway 101 and to the north, south, and west by the Eel River. Scotia's topography ranges from flat areas in the west and central parts of the town, to sloped terrain in the eastern portion toward Highway 101. Steep, forested hillsides and mountains surround the town and river, making expansion in those areas undesirable/impractical.

Services are already provided in the City of Rio Dell, the closest community to Scotia. The next closest community is Stafford, located to the southeast along U.S. 101; it is separated from Scotia by steep terrain and the Eel River, making it impractical as a zone of future influence.

Within the proposed CSD boundary, the Scotia CSD will be able to provide the same level of service that has been provided historically and is currently available. The services provided will be essentially the same as under previous conditions (private ownership), with the benefit of an $18 million CIP, which will grant the infrastructure substantial working life with no projected major capital improvement costs for the next 20 years.

### 6) The Range of Services the Agency is Providing or Could Provide

CSDs are granted powers by the State of California, pursuant to section 61000 of California Government Code, to carry out the functions designated in the petition for formation and any additional services approved by the board of directors and CSD voters. Initially, the services to be provided by the Scotia CSD include wastewater, water, storm drainage, street lighting, parks, recreation, road maintenance, landscape maintenance of public spaces, and fire protection.

### 7) The Projected Future Population Growth of the Area

As of January 2009, the TOS housing office estimates that there are 272 residential dwelling units in Scotia, with an estimated residential population of approximately 860 persons; TOS employs 67 people, including those who work at the Scotia Inn; with an estimated 88 additional employees working for other businesses in Scotia (Frank Bacik, personal communication). Based on the U.S. Census, and using census blocks that are approximately coterminous with the town, the year 2000 population was 849 (Tract 06023- 011100 and blocks 4 through 7, 10 through 25, 27 through 33, and 38) (SHN, September 2007).

Scotia is essentially "built out" as there is limited availability of development within the proposed boundaries. The vast majority of parcels are "substandard" when compared to County Zoning requirements for Residential One-Family zone especially regarding lot sizes, yard, and maximum ground coverage requirements, thus the necessity of the P combining zone. The P combining zone allows these non-conforming lots to be created because the town was developed prior to the zoning code being adopted. In essence, with the P overlay, existing non-conforming standards become the standards for each individual lot. However, County code does not allow a lot that does not comply with the code to change in a way that further exacerbates non-compliance. Simply put, there is not adequate space for most residential lots in Scotia to accommodate secondary dwelling units. Of the existing residential lots, only 11 conform to current zoning requirements. Of those 11, only 5 have adequate size or yard dimensions or maximum lot coverage to accommodate secondary dwelling units. At this time, it is speculative to say that the three vacant residential lots would support second dwellings, because it would depend on the extent of site development. The subdivision will result in 3 vacant residential lots and 2 vacant commercial lots. Development of these new parcels could result in a very slight increase in population (SHN, 2009).

The industrial areas of the town zoned MH/Q will be used by HRC as it continues to harvest timber and produce lumber at the Scotia mill. Essentially, areas used for outdoor lumber storage and the sedimentation pond will continue to be used as part of the lumber mill operations and are not considered vacant. No plans exist to change from lumber production to some other industrial use in the foreseeable future (SHN, 2009).

### 8) Local Governmental Agencies Presently Providing Services to Such Area and the Present Level Range and Adequacy of Services Provided by Such Existing Local Governmental Agencies

Currently, services provided by local governmental agencies include law enforcement (County Sheriff), road maintenance (County Department of Public Works), land use regulation (Planning Division, County Department of Community Development), new construction/design review (Building Division, County Department of Community Development), public health (County Department of Public Health), and other County administrative duties (such as, elections, coroner, libraries, etc.). These services will continue to be

provided after formation of the CSD. No changes are expected in range and adequacy of the services provided.

**9) The Existence of Agricultural Preserves or Farmland Security Zones in the Area That Could Be Considered Within An Agency's Sphere of Influence and the Effect On Maintaining the Physical and Economic Integrity of Such Preserves in the Event That Such Preserves are Within a Sphere of a Local Governmental Agency (56426, 56426.5a)**

No Farmland Security Zones or agricultural preserves exist within in or adjacent to Scotia.

## 9.2 Determination

**Based on the above analysis, a "status quo" sphere of influence is sustainable and appropriate for the Scotia CSD** (Figure 3). The SVFD will continue to serve its current response area, with no intentions to provide services to nearby communities because they are already served by other entities. The boundaries are consistent with the subdivision boundaries being processed by Planning and Building Divisions of the Community Development Services Department of Humboldt County.

No changes to the current conditions within the sphere of influence will occur as the result of forming a CSD and creating a subdivision. Existing land uses will remain the same. Little growth in population will occur that could exceed capacity of public utilities and services. Cooperative measures will continue in the area of fire protection and emergency response contributing to the maintenance of social and economic interdependence.

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20090515-DEA.doc

20090515-FinancialAssessment.doc

..\data\20090513-CSDSchedule-Rev2.ML5

# Appendix A

# Detailed Engineering Analysis

## Appendix B

# Schedule for Repairs to Existing Infrastructure

# Appendix C

# Financial Analysis

**The Detailed Engineering Analysis is bound under separate cover.**