Orenco Systems® has been refining wastewater technologies since 1981. In the process, Orenco's engineers and scientists have accumulated 500 years' experience in providing affordable, sustainable wastewater solutions.

Orenco's wastewater technologies serve communities and developments of all types and sizes. They take the burden off maxed-out municipal systems,

... We do it all.

Wastewater Solutionsfrom Orenco Systems[®], Inc.



handle fringe development, and provide affordable alternatives for areas facing environmental compliance orders. Because they use little power and enable water reuse, they define the very future of sustainable wastewater engineering.

Orenco's wastewater equipment has been installed at the top of glaciers in Alberta, eco-villages in Australia, hotels in Greece, USAID projects in Guatemala, and in cities, subdivisions, and resorts throughout the world.

Orenco is recognized worldwide for its expertise, and our staff and distributors provide value-added services at every phase of a wastewater project, from planning and finance through management protocols and lifetime support. On the inside of this brochure is a brief list of our technologies, markets, and services.

From the South Island of New Zealand ...

To the suburbs of Lacey, Washington ...



Orenco® Solutions

Defining sustainable solutions since 1981



Three Decades of Solutions

Headquartered on a 26-acre (10.5 ha) site in Sutherlin, Oregon, Orenco® has grown to become an industry leader over the past three decades. The company has about 300 employees and more than 300 points of distribution in North and Central America, Australasia, Europe, and Africa. Our products and technologies have been installed in more than 70 countries around the world.

Orenco is owned and managed by engineers who hold multiple patents, and their technologies are based on sound scientific principles, as well as affordable life cycle costs. Orenco's research and technologies appear in numerous publications, and our professional staff are regularly asked to give workshops and offer trainings.



For more information, including project summaries and case studies, call Orenco at 800-348-9843 or 541-459-4449, or go to www.orenco.com/systems.

Orenco°

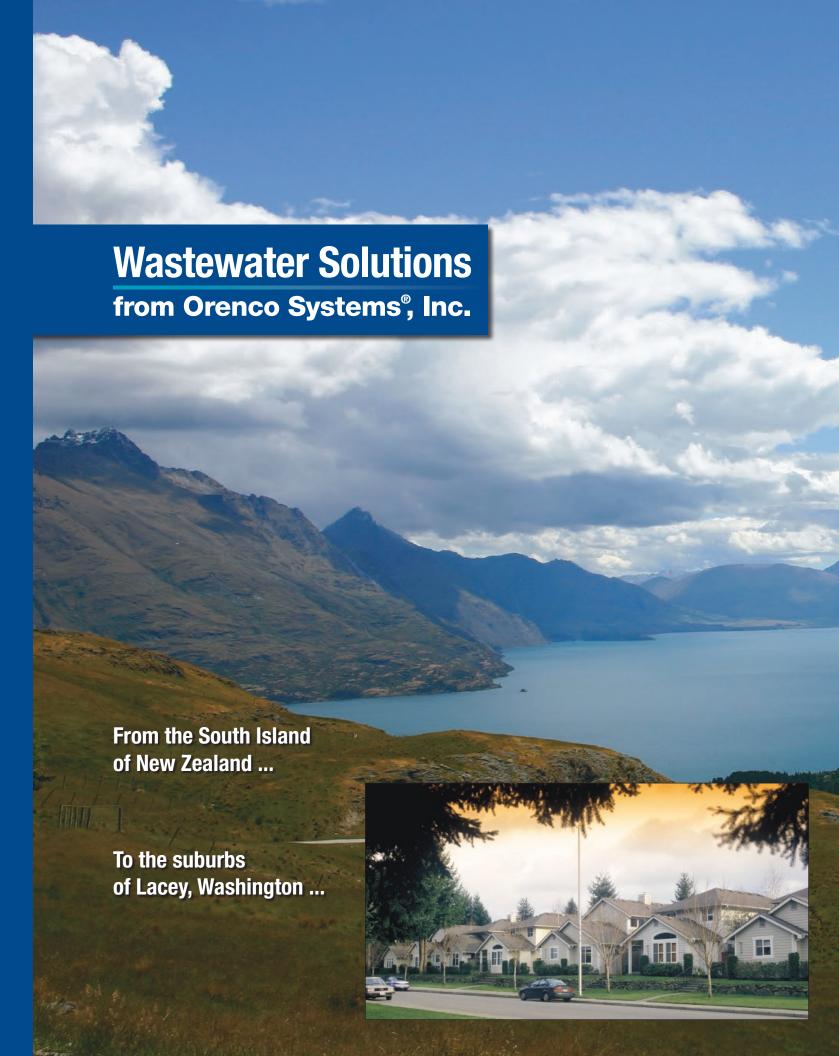
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TECHNOLOGIES

Orenco's technologies can be purchased alone or as part of a completely integrated collection, treatment, and dispersal package.

Wastewater Collection & Conveyance

- Effluent-only sewer systems (also known as STEP/STEG systems)
- A fraction of the cost of traditional sewers; compatible with existing infrastructure
- For use in residential clusters, subdivisions, and communities
- Ideal for use with media filters, SBRs, MBRs, oxidation ditches, lagoons, etc.







Audubon Center, Los Angeles, California

Water, Wastewater, & Industrial Controls

- Simple alarms to custom pump station panels and treatment system panels
- Advanced features, including remote telemetry and third-party MODBUS® connectivity
- UL listings for US and Canada; CE marking for Europe
- For use with residential, commercial, industrial, and municipal installations
- OEM panels and value-engineering



Decentralized Wastewater Treatment

- Secondary treatment systems: AdvanTex® recirculating media filter
- Tertiary treatment systems: disinfection, polishing, and nutrient removal (TN, NH₃, TP)
- For use in residential clusters, subdivisions, commercial facilities, mobile (temporary) facilities, and communities
- One property or thousands



Jack's Point Resort, Queenstown, New Zealand



Jack's Point Resort: AX-100 Treatment System

Municipalities & Communities

- Affordable collection and treatment technologies
- Affordable integration of fringe developments; sustainable service-area expansion
- Compatible with existing infrastructure; low-impact installation
- Low life cycle costs: low energy requirements, low-cost O&M
- Watertight throughout, protecting public health and the environment



Missoula, Montana

Different market sectors value Orenco's wastewater solutions for different reasons.

MARKETS

The benefits of a professionally managed

sewer system, beyond the urban core

• Infrastructure on demand: modular con-

Accommodates sustainable development

practices; preserves open space

struction, deferred costs, low up-front capital

New Subdivisions

investment

Victoria, Prince Edward Island, Canada

Commercial Facilities

- Outstanding effluent quality; capable of meeting stringent regulatory requirements
- Easy to operate with 24/7 monitoring via remote telemetry
- Ideal for schools, churches, offices, restaurants, casinos, rest stops, campgrounds, RV/mobile home parks, mining camps, etc.



Entergy, White Bluff, Arkansas

Living Waters Ranch, Idaho





Paradise Cove, Malibu, California

SERVICES

Orenco doesn't just supply equipment; we provide a comprehensive approach to wastewater solutions.

Planning & Permitting Support

- Regulatory compliance and permits, including subsurface discharge and NPDES
- Land planning, lot size/density, master planning, facility planning
- Life cycle cost analysis, proforma budgeting



Financial Support

- Identification of private funding options for engineering, equipment, and construction of community systems
- Simplified process, expedited timeline, rapid approval
- Risk sharing, design/build options



Training & Technical Support

- Stakeholder presentations and end-user education
- Engineer workshops on equipment and system design
- Installer and operator training

Engineering & Design Support

- Design assistance, hydraulic modeling
- Drawings, details, submittals, specifications
- Review of preliminary engineering reports
- Facility plan reviews



Sustainable Strategies

- Water reuse, subsurface irrigation, groundwater recharge
- Comparative analyses of power consumption; operational carbon footprint
- Assistance with LEED reporting, documentation



Construction Management

- Referrals to design/build partners
- Pre-bid assistance with contractor prequalification
- Bid assessment and recommendations
- Construction oversight
- Start-up assistance



Asset Management

- Operation & Maintenance manuals
- Technical assistance and product support
- Planning and budgeting for equipment repair and replacement
- Assessment and optimization of energy management
- Assessment and optimization of operational, environmental, and financial performance

