



# Nutrient Management Solutions

Ostara's award-winning nutrient recovery technology is a sustainable solution to global nutrient issues.

2005	Year Ostara was Founded
25,000	Tons Annual Fertilizer Production Capacity
22	Pearl® Systems Worldwide
14.3 Million	People Served by Ostara's Nutrient Recovery Facilities
50+	Years of Pearl® Operational Experience

## Recovering One Precious Resource to Protect Another

Ostara's nutrient recovery technology helps protect precious water resources by recovering phosphorus and nitrogen from municipal wastewater streams and transforming them into a high-value, market-ready fertilizer, sold as Crystal Green®.

The process helps communities battle both point and non-point source pollution by sustainably producing a local and eco-friendly source of phosphorus fertilizer. For wastewater treatment plants, Ostara's technology greatly reduces operational costs associated with nutrient management while helping with permit compliance.

Ostara's proprietary Pearl® and WASSTRIP® technologies help turn wastewater treatment plants into resource recovery facilities by turning nuisance struvite into a revenue-generating commercial fertilizer.

## Transforming Wastewater Treatment to Resource Recovery

Ostara is the market leader in phosphorus recovery with more installations and production capacity than any other technology provider. Our closed-loop solution produces high-purity, market-ready fertilizer that is consistent across all installations, globally.

Ostara enters into long-term purchasing agreements, providing our clients with a guaranteed revenue stream while simultaneously helping them to minimize nutrient pollution and reduce operational costs.



# Ostara Commercial Installations Worldwide

SITE NAME	LOCATION	PLANT OWNER	PLANT CAPACITY (MGD)	OSTARA REACTORS	YEAR INSTALL	WASSTRIP
Durham AWWTP	Tigard, OR	Clean Water Services	20	2 - Pearl 500 1 - Pearl 2K	2009	Yes
Nansemond WWTP	Suffolk, VA	Hampton Roads Sanitation District	20	3 - Pearl 500	2010	Planned
York WWTP	York, PA	City of York	20	2 - Pearl 500	2010	No
Rock Creek AWWTP	Hillsboro, OR	Clean Water Services	30	2 - Pearl 2K	2012	Yes
Slough STW	Slough, United Kingdom	Thames Water	15	1 - Pearl 500	2012	Planned
Yakima Regional WWF	Yakima, WA	City of Yakima	40	2 - Pearl Fx	2012	No
H.M. Weir WWTP	Saskatoon, SK	City of Saskatoon	20	1 - Pearl 2K	2013	Yes
Nine Springs WWTP	Madison, WI	Madison Metropolitan Sewerage District	40	2 - Pearl 2K	2014	Yes
F. Wayne Hill WRC	Burford, GA	Gwinnett County Department of Water Resources	50	2 - Pearl 2K	2015	Yes
Amersfoort	Amersfoort, Netherlands	Waterboard Vallei & Veluwe	15	1 - Pearl 2K	2015	Yes
Gold Bar/Clover Bar	Edmonton, AB	EPCOR Water Services	80	1 - Pearl 10K	2015	Planned
West Boise WWTP	Boise, ID	City of Boise	110	4 - Pearl Fx	2015	No
Stickney WRP	Stickney, IL	Metropolitan Water Reclamation District of Greater Chicago	1,200	3 - Pearl 10K	2016	Yes
Truckee Meadows WRF	Reno, NV	Cities of Reno and Sparks	40	1 - Pearl 2K	2016	No
Madrid Sur	Madrid, Spain	Canal de Isabel II	110	1 - Pearl 2K	2016	Planned
Opequon WRF	Winchester, VA	Frederick-Winchester Service Authority	8	1 - Pearl 2K	2016	Planned
St. Cloud WWTF	St. Cloud, MN	City of St. Cloud	18	1 - Pearl 2K	2018	Yes
RM Clayton WRC	Atlanta, GA	City of Atlanta	70	2 - Pearl 2K	2018	No
Cielcza STP	Jarocin, Poland	City of Jarocin	10	1 - Pearl 500	2019	Yes
Paso Robles	Paso Robles, CA	City of Paso Robles	10	1 - Pearl Fx	2019	No
New Water	Green Bay, WI	Green Bay Metropolitan Sewerage District	140	4 - Pearl Fx	2019	No
Shafdan WWTP	Tel Aviv, Israel	Mey Ezor Dan	125	2 - Pearl 10K	2020	Yes