Oneka
Wave Powered Sustainable Desalination

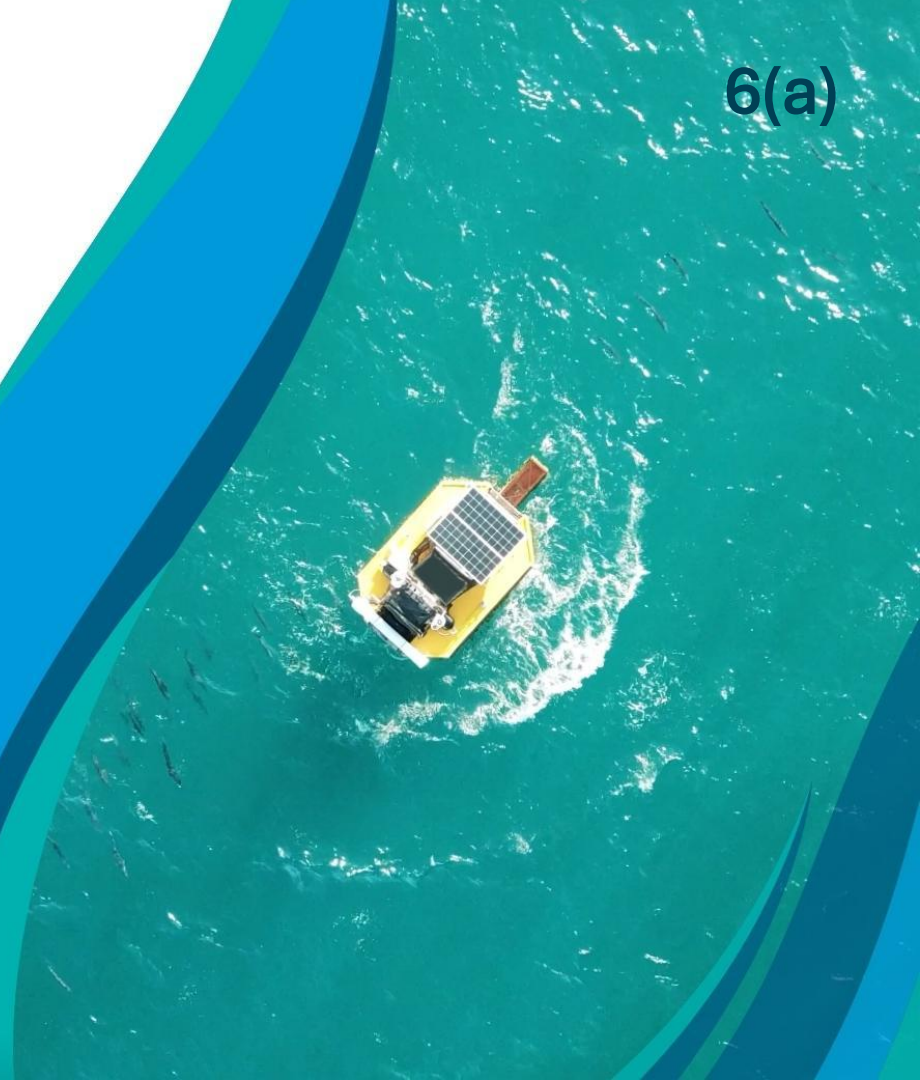
Municipality of
Shelburne

6(a)

SUSTAINABLE DESALINATION PROJECT PROPOSAL

Making the oceans a sustainable and affordable source of freshwater

Presented to the City Council on May 13th 2026

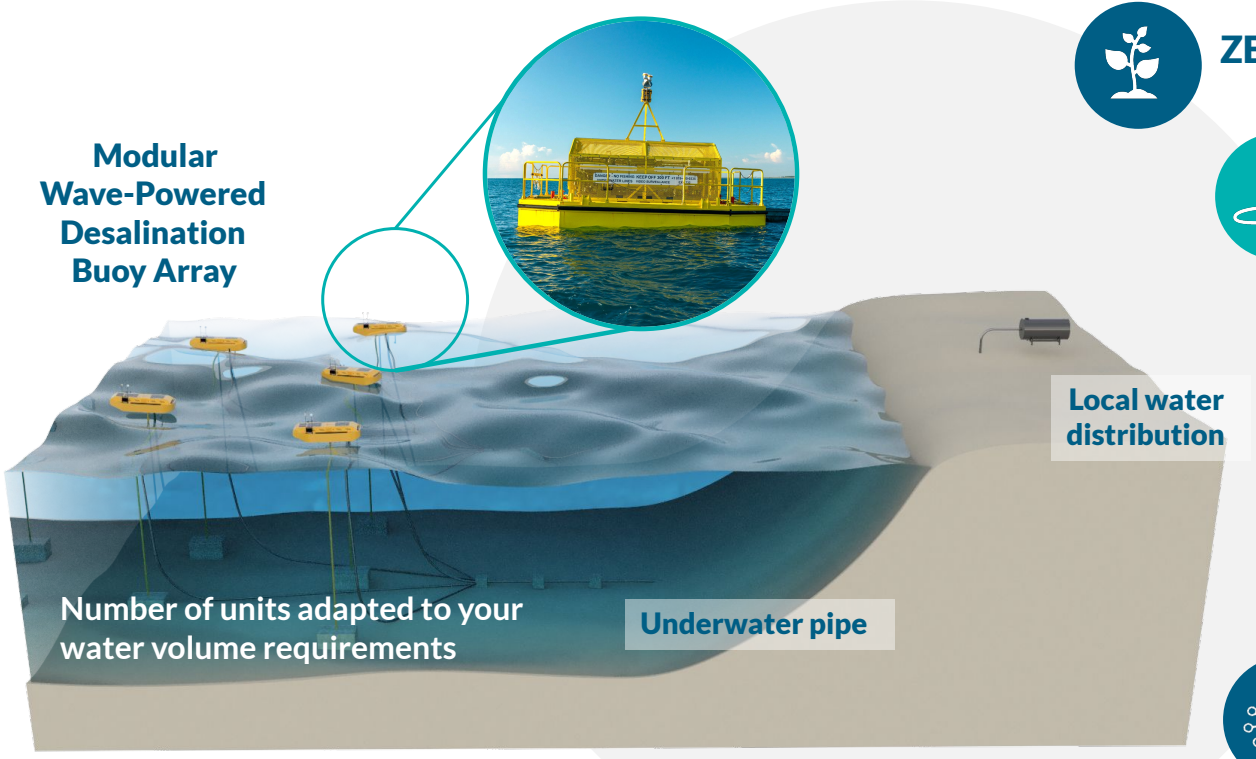


Context: Municipality of Shelburne

- **Current Water Supply**: Residents have wells at home
- During summers, the Municipality experienced recurring water shortages, despite improved conditions this past year. Periodic stress on water availability. Town of Shelburne has offered for free some water to the residents.
- **Pressure on resources:** increase in summer tourism and droughts linked to climate change.
- **Local Economy** : Fisheries, Maritime & Tourism
- **Coastal context** : municipality surrounded by the ocean
- **Key challenge:** securing sustainable water to increase community resilience and support economic development

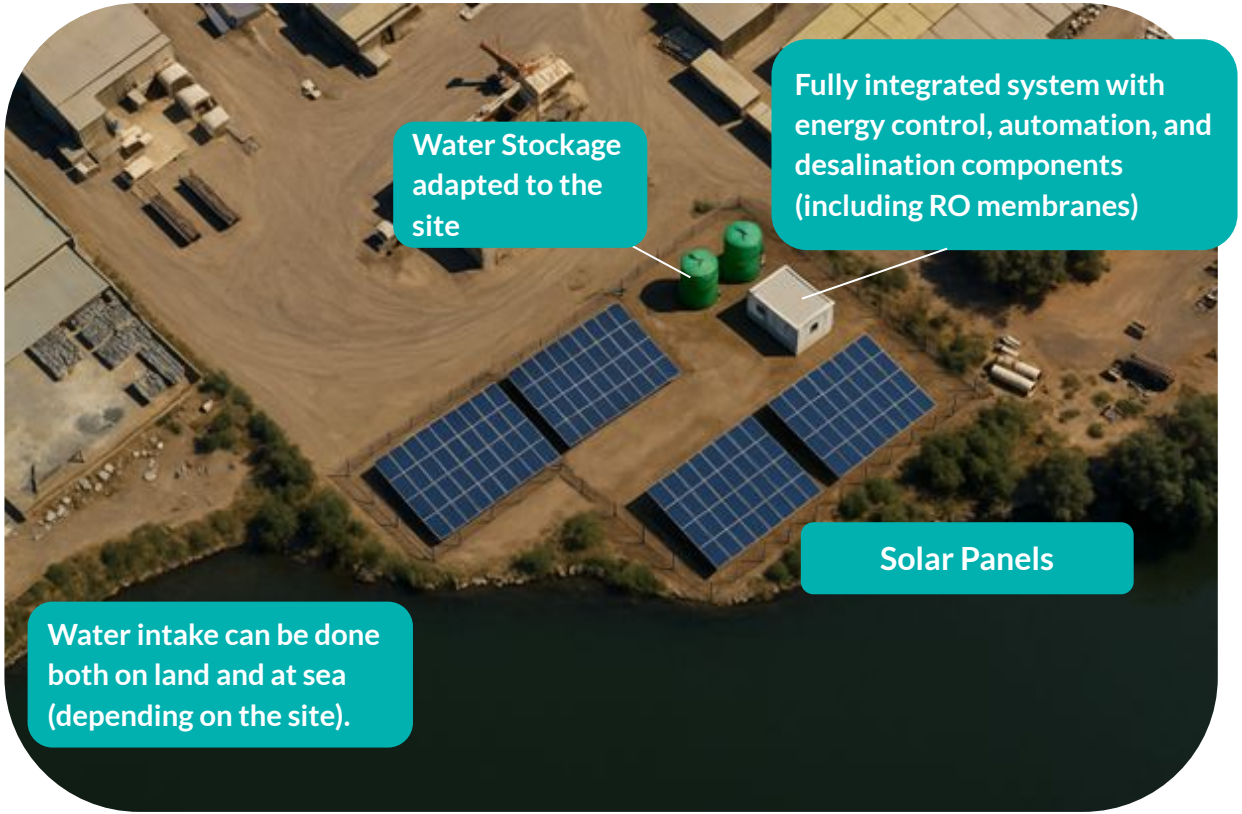
WAVE ENERGY SYSTEM OVERVIEW

Modular Wave-Powered Desalination Buoy Array



- ZERO GHG EMISSIONS
- ZERO LAND USE FOR DESALINATION
- LOWER SALINITY & WELL DIFFUSED BRINE
- WATER INTAKE SAFE FOR MARINE LIFE
- DECENTRALIZED - GRID INDEPENDENT
- POTENTIAL PROMOTION OF MARINE LIFE

ONEKA'S SOLAR-POWERED MODULAR SYSTEM OVERVIEW

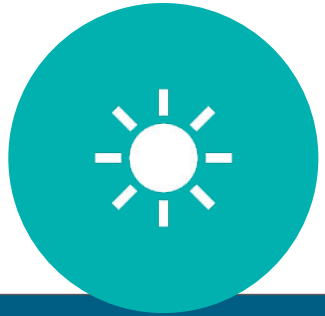


- **ZERO GHG EMISSION**
- **WATER INTAKE SAFE FOR MARINE LIFE**
- **LOWER SALINITY & WELL DIFFUSED BRINE**
- **DECENTRALIZED - GRID INDEPENDENT**

FACTORS EVALUATED BY ONEKA

Wave-Powered Solutions

- Water volume required
- Wave height and period throughout the year
- Bathymetry
- Marine Protected Areas (MPAs)
- Nearby maritime or port facilities



Solar-Powered Solutions

- Water volume required
- Solar Irradiation
- Land availability & protected areas
- Feasibility of beach wells & other intakes or outfalls

PRIMARY BUSINESS MODEL

Water Supply Service Model

(build own Operate)

Long-term water supply agreement with Oneka - 10 to 20 years

Hybrid Model

Initially operated by Oneka with transfer to client over time.

Who we serve?

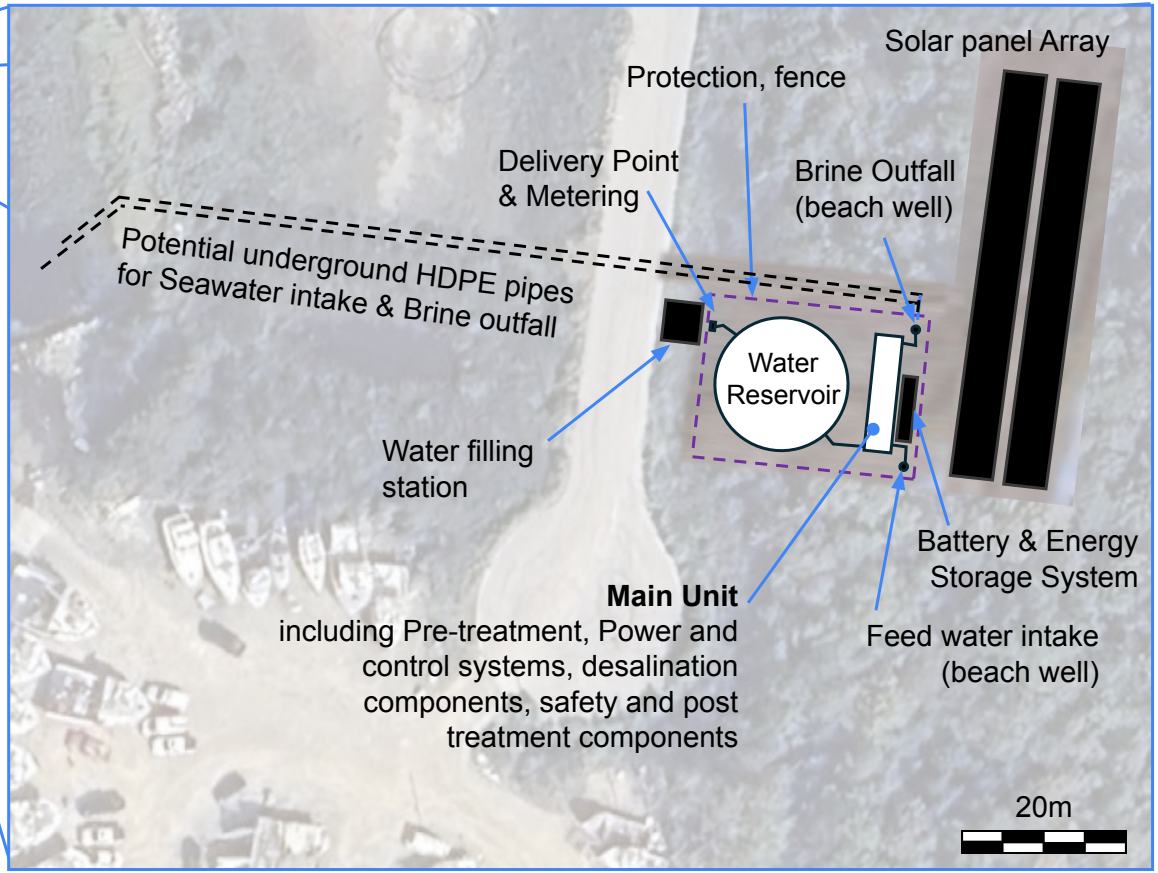
- Municipal & Water Utilities
- Heavy & Process Industries
- Agriculture & Mining
- Resorts & Tourism

The Advantages

- Securing long term water supply
- Predictable & stable cost
- Flexible structure
- Sustainability leader
- Potential phased project scale-up

OUR PROJECT PROPOSAL

Potential Site: Adamant Drive



Area of the Production site: ±10,000-15,000 ft^2

Water production capacity over 100 m^3/d

*System sizing, arrangements & design pending engineering

Water Distribution Station

- Oneka is responsible for the production and water distribution systems;
- Payments of water from residents to be sent directly to the municipality including the fees;
- Oneka will provide the water operators required to operate the project, eliminating the need for the Municipality to hire and manage its own specialized operating staff.

**Example of a water distribution system*

Committed Water Volumes

Annual Water Commitment: 26,335 m^3
Total Annual Cost (12 months): 254,900$

- *Possibility of ramp up to be discussed*
- *Exact volumes determined in the contract*

Business Model & Financial Structure

Sustainable and autonomous water supply service

- **Turnkey service including all costs associated with:**
  - Financing
  - Project engineering
  - Permit/license applications
  - Installation and commissioning
  - Water distribution system
  - Operations and maintenance (incl. Labour, material, parts replacements, monitoring, system adjustments as needed, cleaning etc.)
- **Price for water: 0.0098 $/L (CA$9.68/m^3)**
  - Project initiation $95,000 (including the water distribution system)
  - Scaling project could reduce the price of water by over 75%
- **Contract term:** 15 years (adjusted depending on ramp-up)
  - **Commitment to a minimum purchase volume (take-or-pay structure)**
- **Possibility of project buyback**

Responsibilities & expenses in the 1st year

Expense Item	Price Estimate ($)
Set-up Fees (First Year Only)	
Project Initiation fee	95,000 $*
Land preparation - leveled space	15,000$-30,000$
Site fencing & security (for water reservoir)	10,000-20,000$
Total:	**Between 120,000 and 145,000$**
Water delivered up to the end of 2026	**Up to 65,000$* (less water sold)**

*Possibility of partial deferred payments

Benefits for the Municipality of Shelburne

- Water supply security for the community
- Long-term stabilization of water-related costs
- Increased resilience to climate change
- Sustainable positioning of the Municipality of Shelburne
- Maintaining good relations with the people who live there

Project Impacts

Environmental

- Protection of local freshwater resources
- Use of GHG-free technology
- Low-salinity brine discharge

Social

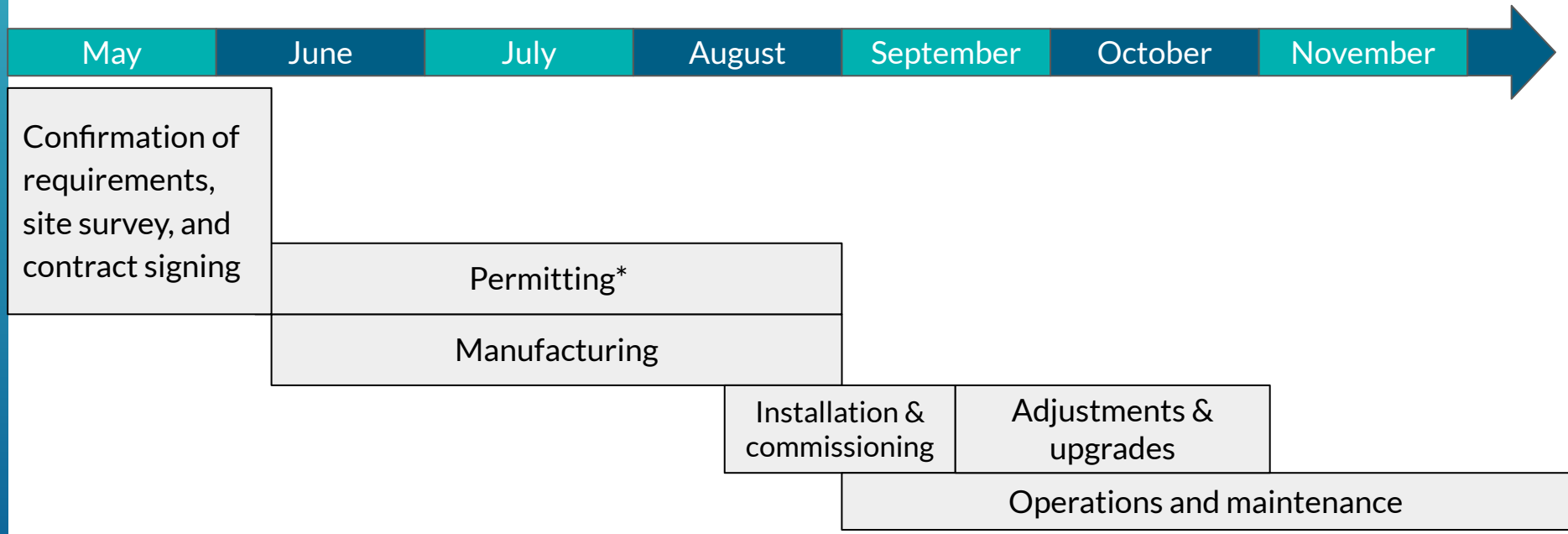
- Creates a new water source for residents, avoids long water hauling and increases collective resilience
- Limits unexpected price increases for the use of emergency solutions
- Citizens' positive perception of the municipality as proactive, responsible, and forward-looking

Steps for Setting Up a Project with Oneka

1. **Initial Assessment:** Validation of water requirements, needs and site specifications
2. **Technical and Environmental Feasibility:** Engineering Team performs the analysis and preliminary design of the project
3. **High-Level Proposal:** Presentation and adjustments of the preliminary design of the project
4. **Detailed Proposal:** Completion of the solution design and water supply agreement tailored to your needs.
5. **Contract preparation:** Upon the execution of the agreement, the permitting and manufacturing processes are initiated in parallel to rapidly complete the project and start delivering sustainable freshwater.

Now

Preliminary Schedule



Tentative schedule with significant uncertainty for the permitting and challenge for this season due to already being in may. Oneka to put all efforts to have the system operational at least for the end of the season. Adjustments to be completed for full normal operation for the 2027 season (billing would be still based only on the committed water volumes only once the system is fully commissiong and ready to deliver water).

Oneka

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