

Oregon Freshwater Simulations, Inc., Annual Benefit Report

David Conklin, principal, Oregon Freshwater Simulations, November 18, 2021

Overview

The State of Oregon (<https://sos.oregon.gov/business/Pages/benefit-company.aspx>) requires benefit companies to prepare an annual benefit report identifying:

- The actions and methods used to provide a general or specific public benefit.
- Any circumstances that hindered or prevented a benefit.
- How well the benefit company met or exceeded the third-party standard.

Incorporation as a Benefit Company

Oregon Freshwater Simulations (OFS) was incorporated on August 18, 2015, as an Oregon Benefit Company. OFS' Articles of Incorporation include this statement:

"The corporation is a benefit company subject to ORS 60.750-60.770."

OFS' Bylaws sec. 4.3.5 identifies OFS' specific public benefit objective as:

"Over the first ten years of operation, return \$500,000 to the public universities of Oregon as donations, license fees, royalties, et cetera."

Adoption of a Third-Party Standard

OFS has adopted the third-party standard provided by B Lab at www.bimpactassessment.net (OFS Bylaws sec. 4.1). The 2020 B Impact Assessment for OFS is available from David Conklin on request. Contact Dave Conklin by email at david.conklin@freshwatersim.com or by phone at 503-954-1826. The impact assessment for 2021 cannot be completed until after the end of calendar 2021, since OFS' fiscal year is the same as the calendar year.

Actions and Methods Used to Provide a General or Specific Public Benefit

Since its inception, OFS has sought to make the Willamette River Basin (WRB) model available to WRB stakeholders outside academia – landowners, NGOs, and government agencies at all levels of government. The WRB model was originally developed at Oregon's 3 largest public universities as part of the Willamette Water 2100 (WW2100) research project.

The effort to make the WRB available to the public bore fruit in 2021 when the code and data for the Community Willamette Whole Watershed Model (CW3M) was made available for public access on the GitHub website. CW3M is a descendant of the model developed in the WW2100 project. OFS has curated the code and data for CW3M for several years. CW3M now has a Steering Committee composed of representatives from NGOs, government agencies, and academia who have all signed a

memorandum of understanding (MOU) pertaining to administration of CW3M. The CW3M Steering Committee has designated OFS as the “principal developer”, a role defined in the MOU. In essence, OFS is technical caretaker for CW3M.

In 2020 and 2021, OFS participated in a research project about wetlands in the McKenzie River basin. For that project, OFS extended CW3M to include simulation of stream temperatures and wetlands.

Several years ago, OFS took on a project to develop a “water box”, a household water treatment device using germicidal ultraviolet (UVC) light as a substitute for sanitizing water by boiling. That project has now been partly taken over by a group of volunteers, but OFS is still providing logistical support. The UVC device has many potential benefits relative to boiling: much greater energy efficiency, zero greenhouse gas emissions, savings in time and fuel costs, reductions in waterborne disease. The volunteer group is now conducting a field trial in Uganda, Africa; OFS has facilitated production and shipment of a trial lot of 24 water boxes to Uganda.

Circumstances that Hindered or Prevented a Benefit

OFS has operated at a loss for several years running. While losing money, it has not been practical to make donations to Oregon public universities.

How Well the Benefit Company Met or Exceeded the Third-Party Standard

B Lab’s impact assessment methodology is intended for larger companies than OFS. OFS does not qualify for certification as a “B Corporation”. OFS consists of one full-time employee and one part-time employee. Despite OFS’ small size, the impact assessment process has had the effect of motivating the formalization and extension of vacation and medical insurance benefits, for both the full-time person and the part-time person.