

The SeaDoc Society

People and Science Healing the Sea



The mission of the SeaDoc Society is to ensure the health of marine wildlife and their ecosystems through science and education.

Salish Sea Forever

What does it take to achieve a healthy coastal ecosystem?

How do you create a place where both wildlife and people thrive?

Is it possible to mitigate the damaging effect of pollution, disease and population growth on a fragile ecosystem?

These Are The Urgent Questions The SeaDoc Society Is Working Hard To Answer.

Founded in 2000, the SeaDoc Society conducts and sponsors vital scientific research in the inland waters of the Pacific Northwest, also known as the Salish Sea. This rich and vibrant ecosystem is home to 37 species of mammals, 172 species of birds, 253 species of fish, and more than 3,000 species of invertebrates. Nearly eight million people make this region their home today while billions of dollars are generated annually by Salish Sea commercial and recreational activities.

Some of the world's most successful businesses—Microsoft, Amazon, Boeing, and Starbucks—are headquartered in the region in large part because of the high quality of life that this remarkable body of water offers their employees and customers.

The Challenge Before Us

In the blink of an eye, profound and disturbing changes have occurred in the Salish Sea. Increasingly, the sea and its surrounding watersheds are challenged by an ever-growing list of threats. Ocean acidification, a burgeoning human population, increased marine shipping traffic, and unchecked waste water and sewage runoff are just a few of the immediate pressures that are endangering this jewel of an ecosystem.

Most alarmingly, between 2008 and 2011, the number of marine wildlife species in the Salish Sea listed as threatened or endangered nearly doubled from 64 to 113. To compound the problem, a lack of regional decision—making has made it increasingly challenging to manage an ecosystem that stretches across two nations and encompasses hundreds of government entities—municipal, state, tribal and federal.

If healthy ecosystems foster economic prosperity, unhealthy ones represent lost opportunity and income. Whether we depend upon the ocean for our living or for our quality of life, we all benefit from a healthy Salish Sea. We all have an obligation to protect it—but how?



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Doing great research is just half of the equation.

Lasting change comes from communicating those findings to the people who can most effect change.

It Begins With Science.

As with any difficult issue, we cannot fix what is wrong unless we understand the problem. That is why the SeaDoc Society plays a crucial role in Salish Sea recovery.

The SeaDoc Society conducts and sponsors ground-breaking marine research to uncover the environmental factors threatening to unravel the web of life in the Salish Sea and surrounding watersheds.

And while performing world-class research is of paramount importance, ensuring that our findings effect positive change is just as vital.

One of SeaDoc's unique strengths is translating science into action. We act as a catalyst—bringing together interested parties to share information, forge common understandings and design region-wide solutions—something few other marine research organizations in the region are presently doing.

The SeaDoc Society Is Making A Measurable Difference

Our track record is impressive. Over the past 16 years, SeaDoc's research and facilitation efforts have resulted in a series of unqualified successes. Working under the auspices of the Karen C. Drayer Wildlife Health Center at the world-famous University of California Davis School of Veterinary Medicine, SeaDoc has been instrumental in the recovery and protection of the Salish Sea and some of our region's most iconic species. For example:

- Our unique health tracking program has helped mitigate the damaging impact of oil spills and disease on endangered orca populations.
- Our research directly led to the **Tufted Puffin** being officially listed as endangered, thus hastening the recovery of this fragile species.
- Our combined fieldwork and research efforts have informed and guided the successful restoration of the ecosystem's disappearing abalone population.
- Active recovery of forage fish habitat has stemmed from a significant level of SeaDoc research and facilitation efforts.
- Through collaborative fieldwork, SeaDoc helped identify the role
 a virus is playing in causing sea star wasting disease. This deadly
 condition threatens the extinction of these keystone species.
- We performed the foundational research that led to region-wide recovery efforts for threatened Salish Sea rockfish populations.

Now Is The Time To Be Bold

In the last 16 years, SeaDoc Society has made great progress protecting the Salish Sea. We're proud of what we've accomplished in such a short time, yet there is much more to be done and the urgency is clear.

The vitality and sustainability of the Salish Sea is dependent upon the SeaDoc Society, along with our supporters and partners, taking action now.

Here are just a few of the most urgent challenges the Salish Sea faces today:

- The damage that ocean acidification is causing valuable marine resources and wildlife.
- The rise in threatened and endangered fish, marine bird, and mammal populations.
- Unchecked pollution entering the sea from sewage and storm water runoff.
- The negative impact of increased noise, pollution, and collision risk from shipping traffic on marine wildlife.
- Increasing frequency of shellfish bed closures due to pollution and harmful algal blooms.
- Marine wildlife diseases like the emergent starfish wasting disease outbreak that is threatening their extinction.
- Lapses in regional decision-making and environmental oversight.

These problems affect not just the ecosystem—they adversely impact our region's commercial and recreational activities as well as human health and well-being. Without a healthy, sustainable ecosystem, our region will suffer unaccountable economic losses in the years to come.

The positive news is that SeaDoc Society is uniquely qualified to help—we know what to do and how to do it.

Since its inception, the SeaDoc Society has operated very much like a successful start-up company. We saw a gap in the environmental landscape that needed to be filled, and we seized the opportunity.

To date, we have funded nearly \$3.5 million in vital marine research, focusing our investments on the critical issues affecting the health of the ecosystem while working side by side with regional partners to effect change and recovery.



The Salish Sea is the engine that provides spiritual sustenance, economic wellbeing, and an exceptional quality of life for the entire region.

It's our duty to protect it.



Working side by side as ocean stewards we can ensure that this remarkable, diverse ecosystem remains a vision of sustainability in a changing world.

Salish Sea Forever: An Initiative To Double Our Science, Double Our Impact

It is clear that in a very short time the SeaDoc Society has become instrumental in helping protect the Salish Sea ecosystem. We have grown steadily in the last 16 years, and with much success, yet the challenges the Salish Sea faces have accelerated at an even greater pace. The need for good information has outpaced our current staffing—presently we can only focus on just a few of the emerging risks the ecosystem faces.

In early 2016, SeaDoc's leadership launched a \$1.5 million capacity-building campaign to ramp up our efforts and increase our impact.

Our new **Salish Sea Forever** initiative will focus on the following areas of organizational impact and growth:

KNOW

We will double our marine research programs by 2020.

- While the health of some Salish Sea species has been well studied, many have not. Much work needs to be done to understand the multiple pressures that are affecting understudied species and the ecosystem as a whole.
- Our strategy is to work closely with local partners to find the areas where
 we can make the most impact and leverage those results to protect and
 restore the ecosystem.

CONNECT

We will lead an effort to strengthen collaborative decision-making in the region.

- Transboundary cooperation is the glaring omission in the region's present plan to restore and protect Salish Sea marine life. The ecosystem's complex web of political, tribal, and environmental oversight means that there is no single over-arching body that represents the interests of the entire Salish Sea.
- With a long history of convening Pacific Northwest stakeholders, the SeaDoc Society is uniquely positioned to act as a catalyst to help establish a transboundary Salish Sea Ecosystem Council.
- It is imperative that we bring the key players together to forge common understanding and share management of the ecosystem—and we must do it soon.

PROTECT

We will help educate the region so that everyone can help protect the ecosystem.

- Northwest residents cannot change how they steward the ecosystem unless they have actionable information that helps them understand how their behavior and policies affect the sea.
- Whether it is about the negative impact of storm water runoff, overfishing, or oil spills, local citizens and governments urgently need to be accurately informed about the risks of such damaging practices and the rewards of sustainable action.

It Takes A Community

Our goal is to raise \$1.5 million in capacity-building funds by the end of June 2017. The funds will be spent from June 2016-December 2020.

By the end of 2020, SeaDoc Society anticipates that it will have doubled its internal capacity, resulting in a significant increase in SeaDoc-led science, fundraising capacity, regional collaborative decision-making, and public awareness of the challenges facing the Salish Sea ecosystem.

Your Support Is Important

The Salish Sea is a stunning and inspiring ecological jewel that provides unparalleled quality of life for all who live, work, or play within its reach. Restoring and protecting the sea is of vital importance to a sustainable future for our region—clearly, so much lies in the balance if we fail.

A gift to the SeaDoc Society today will help bring the transformative power of scientific research to the most challenging issues facing the Salish Sea and its inhabitants. Your partnership is the key to designing a more hopeful future.

Together, we can shape a healthy, vibrant Salish Sea to be enjoyed by generations to come.

We hope you will join us.



Our hope is that someday our region will serve as an innovative model of how a diverse, multinational ecosystem can thrive despite the inevitable impact of change.

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SeaDoc Society's Mission & Leadership

An independent scientific organization created and operated by UC Davis, the SeaDoc Society is a flagship program of the **Karen C. Drayer Wildlife Health Center at the University of California Davis School of Veterinary Medicine**. The Center and School provide key administrative oversight while lending the organization the wealth of its scientific expertise and institutional reputation for excellence.

The SeaDoc Society is a scientific endeavor, not an advocacy organization. Our staff is comprised of scientists and science translation experts, not lawyers or lobbyists. We are unique in our mandate to catalyze collaboration across international borders. Our primary goal is to ensure that our research findings end up in the hands of the private and public entities that are best able to turn knowledge into action.

The SeaDoc Society is guided by a community of committed volunteers and scientists

Led by Executive Director Kirsten Gilardi and Chief Scientist Joe Gaydos, the SeaDoc Society has become a key player in marine conservation in the Salish Sea. A motivated and passionate volunteer Board of Directors helps lead our work, while a Science Advisory Board of highly respected and knowledgeable scientists provides scientific focus and guidance.

Based on Washington State's Orcas Island, the SeaDoc Society is a powerful example of how a major university, scientists, and concerned citizens can work together to improve the health of the environment.

SeaDoc is funded primarily through private contributions, and all gifts are tax-deductible.

Salish Sea Forever Campaign Steering Committee (as of June 1, 2016)

Kirsten Gilardi, SeaDoc Society Executive Director
Joe Gaydos, SeaDoc Society Chief Scientist & Regional Director
Jim Donald, Salish Sea Community Volunteer
Tom Hughes, Partner, Cedar Grove Investments, LLC
Martha Kongsgaard, Salish Sea Community Volunteer
Ingrid Rasch, SeaDoc Society Board Member
Dave Roberts, SeaDoc Society Board Member
Stephanie Solien, Salish Sea Community Volunteer

For more information on the Salish Sea Forever Campaign or to make a gift, please contact Joe Gaydos at 360-376-3910 or jkgaydos@ucdavis.edu.

www.seadocsociety.org