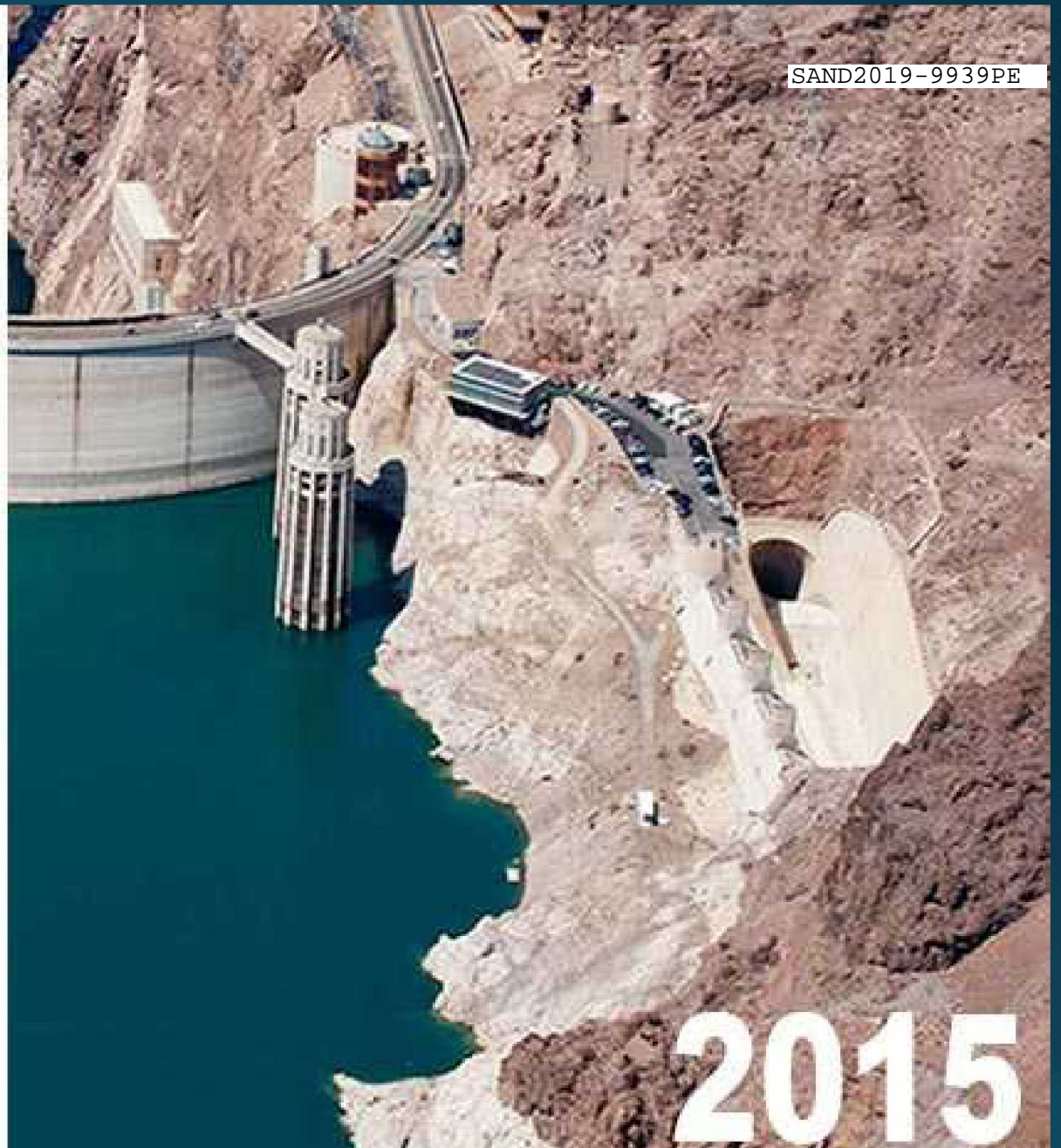


2001



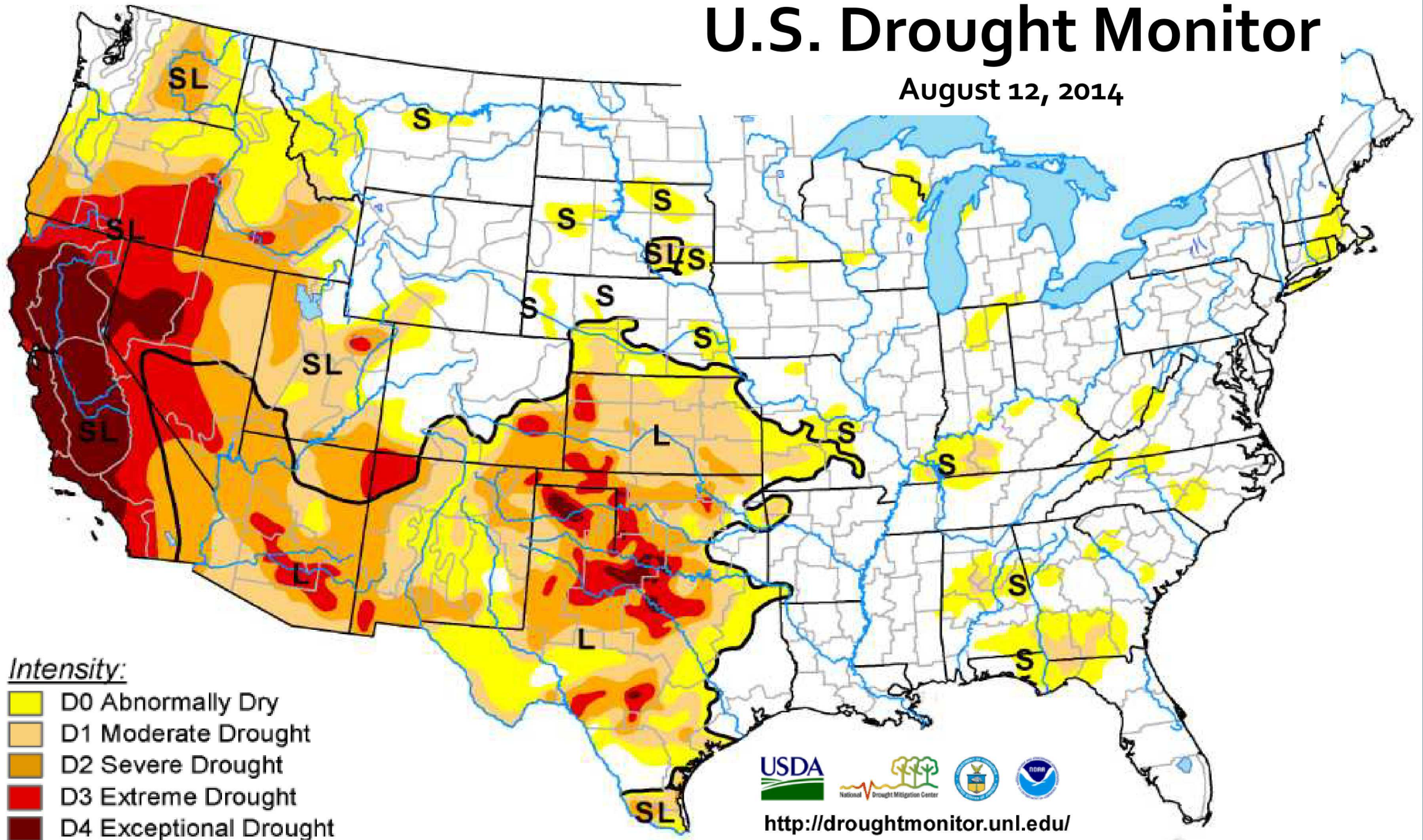
SAND2019-9939PE

2015



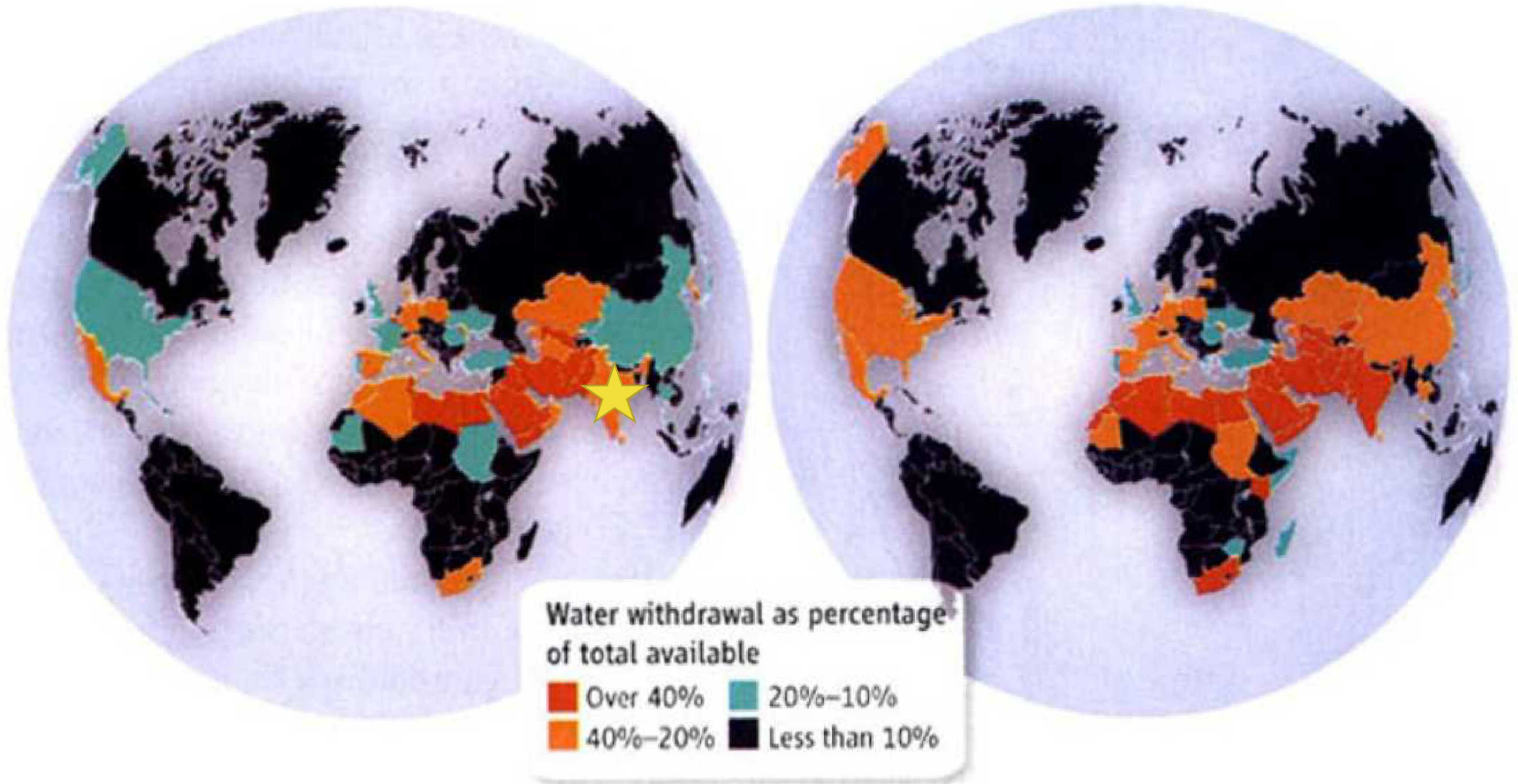
U.S. Drought Monitor

August 12, 2014



1995

2025



1995

2025

‘We Can’t Waste a Drop.’ India Is Running Out of Water.

Population growth, modernization and climate change spawn a resource crisis; trouble in a remote Himalayan region

WSJ, August 19th, 2019

Water withdrawal as percentage of total available



1995

2025

‘We Can’t Waste a Drop.’ India Is Running Out

What’s the solution?!

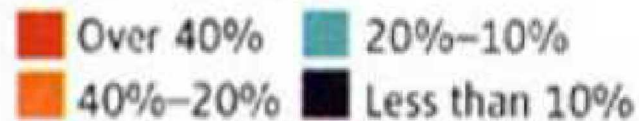
Population growth

a remote Himalayan

region

WSJ, August 19th, 2019

Water withdrawal as percentage
of total available



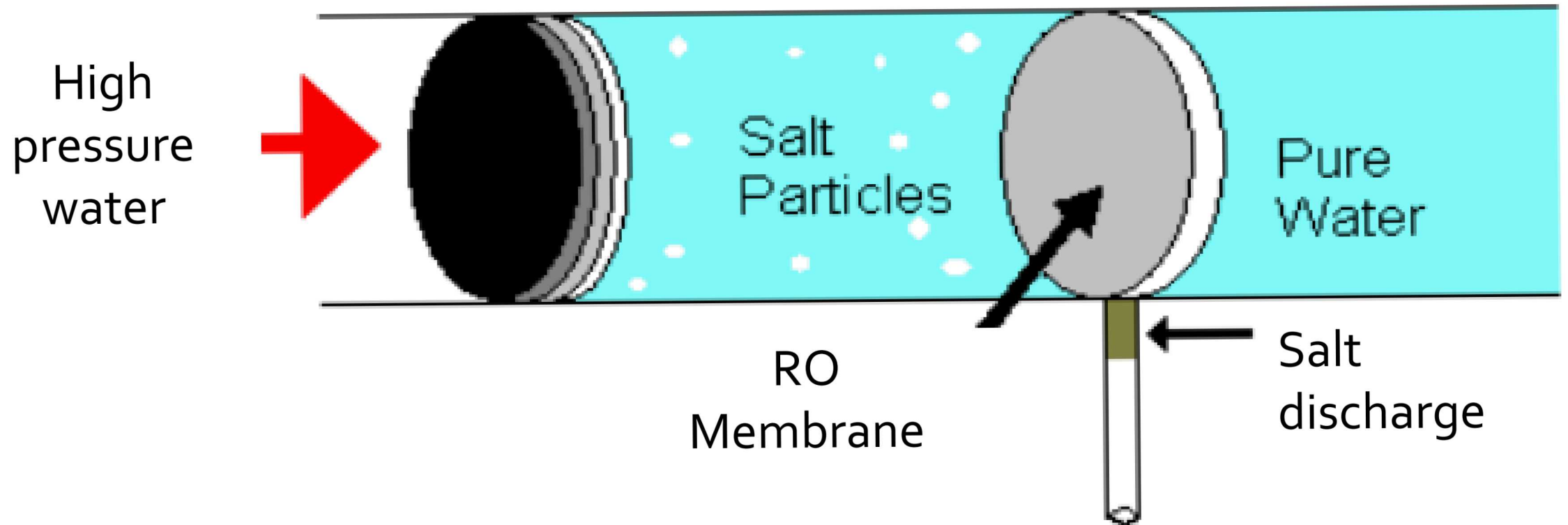
Plenty of Water in the Sea

Reverse Osmosis (RO) water purification of sea water

Our Bio-Inspired RO membranes can reduce the cost to produce fresh water

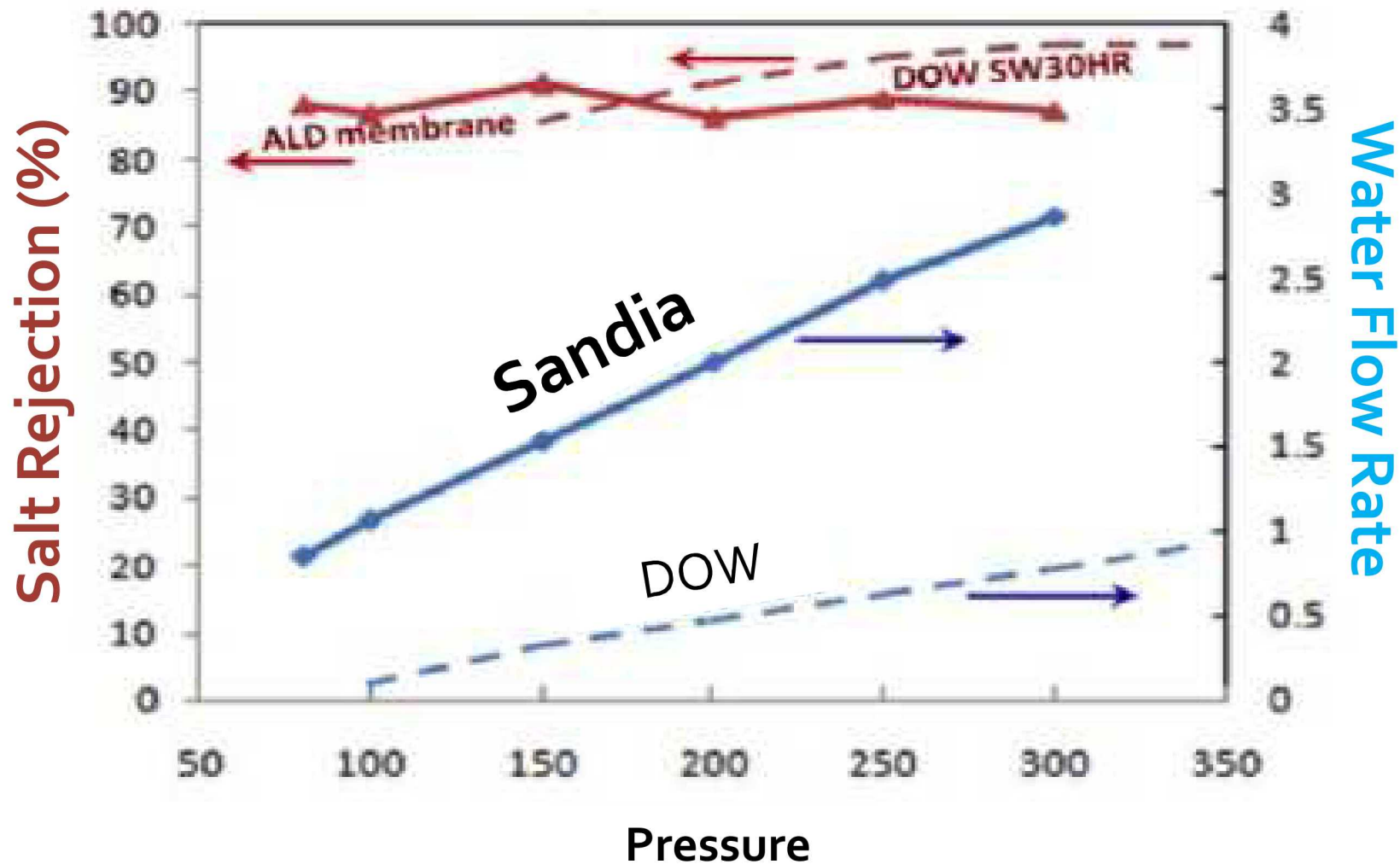


Plenty of Water in the Sea



Higher pressure = Higher cost

The Competition



Sandia RO membranes show **higher pure water flow rates** **AND** **comparable salt rejection** compared to commercial **DOW** membranes



Our Plan: Sell or license the technology

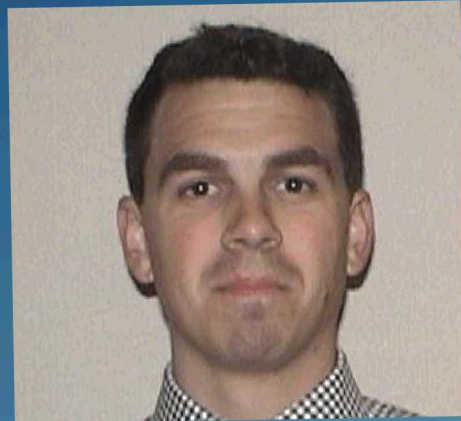
- Large scale (\$1 billion) desalination plant built in San Diego (2016)
- More planned for California
- Worldwide Desalination Capacity: 2.5 Trillion gallons/yr (1999)

<https://www.mercurynews.com/2014/05/29/nations-largest-ocean-desalination-plant-goes-up-near-san-diego-future-of-the-california-coast/>

We Know Water



Stephen Percival Michael Melia



Team of dedicated SNL scientists and engineers

Combined decades of experience

2 awarded U.S. Patents

Patent # 10,130,916

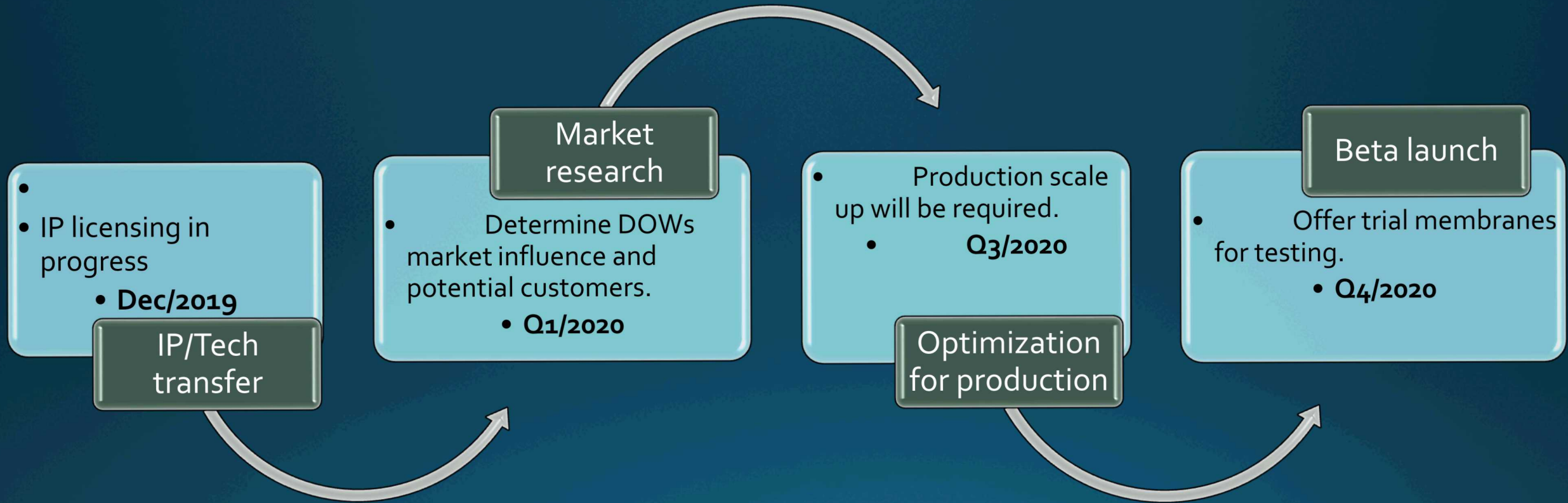
Patent # 9,486,742

Susan Rempe - Inventor



R&D100 award winner - 2011

Our Vision...



This will require ~\$500,000 for labor and materials.

Sandia National Laboratories is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.



Let's Tap The Oceans!