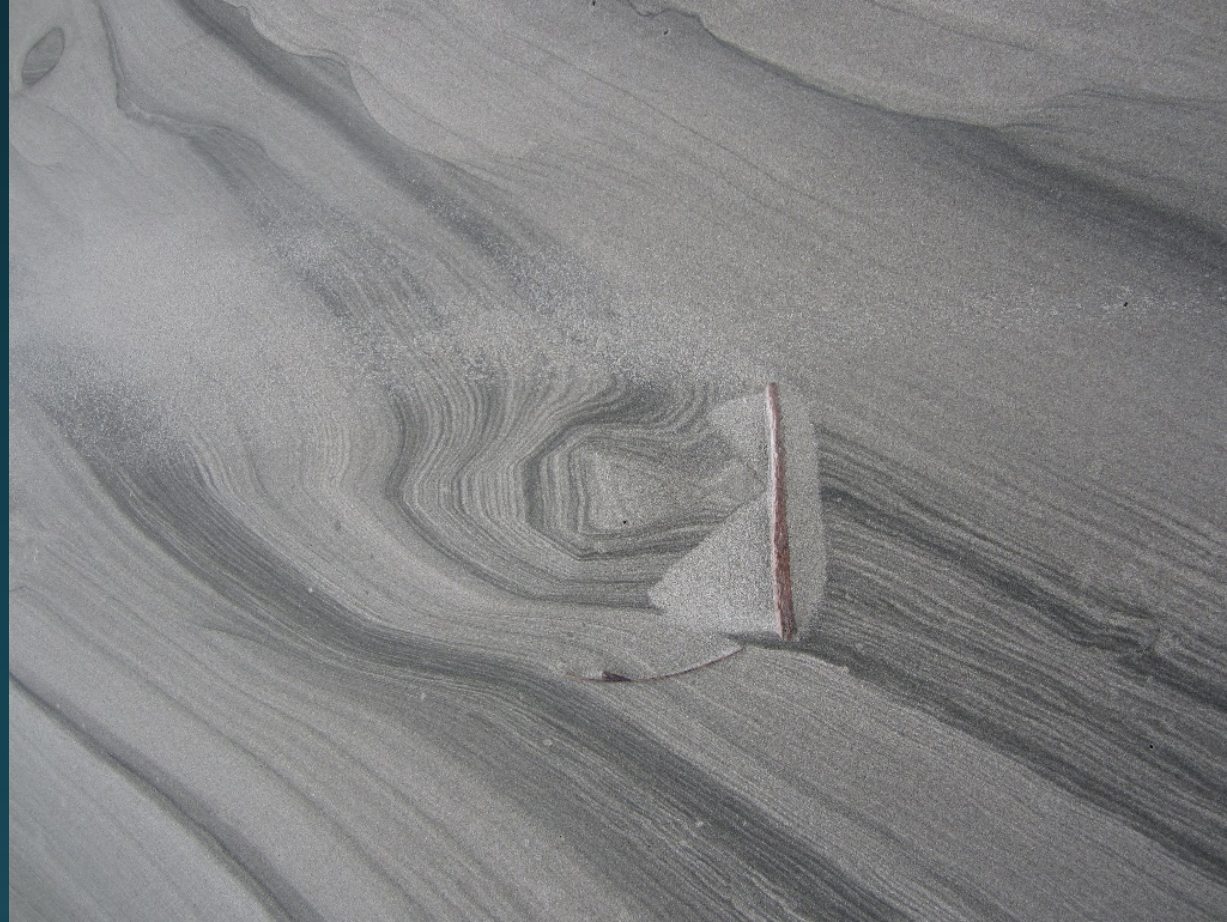




Human Dimensions Research Design

STAC Meeting
March 12, 2018
Tommy Swearingen

What to do with all that social and economic data?

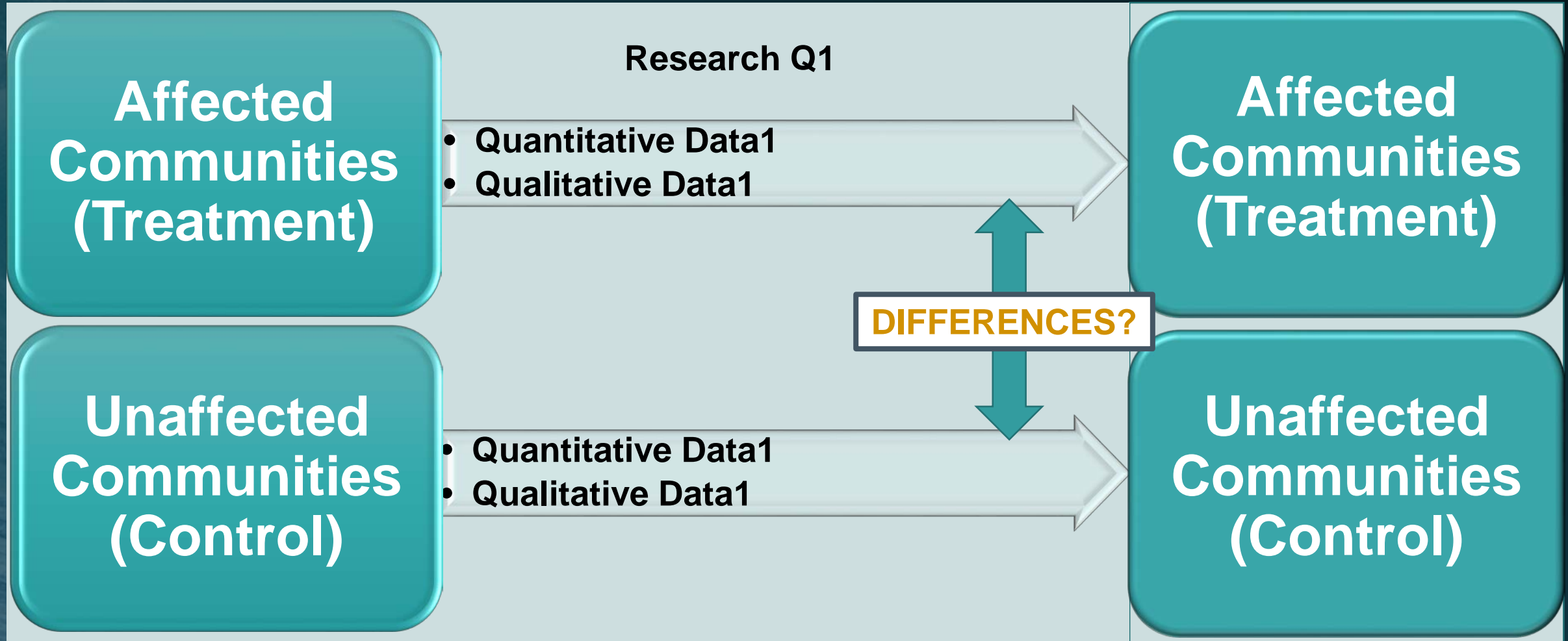


Like sands through the hourglass,
so are the data of our lives....

**Time 1:
Baseline**

Multiple Case Study Design

**Time 2:
Replication**



Human Dimension Monitoring Plan 2012/2017

- Q1. Who are the consumptive users?**
- Q2. What are the drivers and characteristics of the communities of place?**
- Q3. What are the attitudes and perceptions held by community members concerning site implementation?**
- Q4. What are the potential effects to consumptive users from displaced activities?**
- Q5. Who are the non-consumptive users?**
- Q6. What are the non-market values connected to the sites?**

Human Dimension Monitoring Data Sources

Q1 Data: PSU fishers survey, OSU surveys, ODFW intercept surveys, OSU qualitative interviews, ODFW observations and secondary data

Q2 Data: OSU/ODFW ethnographies, U MI case studies, secondary ACS & BEA data, NOAA coastal community indices, TRG study

Q3 Data: OSU residents surveys, ODFW intercept surveys, ODFW business community surveys, OSU qualitative interviews

Q4 Data: PSU fishers survey, OSU qualitative interviews, spatial fisheries economic model, ODFW observations and secondary data

Q5 Data: OSU surveys, ODFW intercept surveys, ODFW pressure counts, PSU PPGIS survey

Q6 Data: OSU ecosystem services model, PSU PPGIS survey, OSU SWB survey

The background of the slide features a photograph of ocean waves. On the left side, a large, curling wave is visible, with white foam at its crest. The water transitions from a deep blue at the bottom to a lighter, turquoise color near the surface. The overall scene is dynamic and captures the power of the ocean.

Benefits, Impacts, and Equity

1. What is the impact of Marine Reserves on the Oregon fishers and fishing occupational community? (Q1, Q4)
2. What is the level of knowledge and support for Marine Reserves among Oregon residents and coast visitors? (Q1, Q3, Q5)
3. What is the impact of Marine Reserves on the Oregon coastal communities? (Q2, Q4)
4. What is the impact of Marine Reserves on potentially affected individuals? (Q4)
5. What are other benefits of Marine Reserves? (Q6)

Research Hypotheses

AGGREGATE

If marine reserves create an adverse impact:

- H1.** On fisheries, then landings, revenues, or profitability will decrease.
- H2.** On coastal communities, then per capita income will decrease and poverty will increase.
- H3.** Then public support will decrease.
- H4.** On individuals, then those individual impacts will be reflected in survey responses or qualitative interviews.

INDIVIDUAL

Analyses **H1**: Fisheries Impacts



Primary
Quant1

Port Landings

Second
Quant2

Ex-Vessel Revenues

Qual

**Expectations
Interviews**

Analyses **H2**: Community Impacts



Primary
Quant

Earned Income

Second
Quant

Per Capita Income

Quant3

**Poverty
Employment**

Analyses **H3**: Knowledge and Support



Primary
Quant1

Support Surveys 2012-20

Second
Quant2

Knowledge Surveys 2012-20

Quant3

**Predictors of Same
Subjective Well Being 2018**

Analyses **H4**: Individual Impacts



Primary
Quant1

Public Perceived Impacts

Second
Quant2

Fishers Perceived Impacts

Qual

Fishers Perceived Impacts

HUMAN DIMENSIONS CASE STUDY DESIGN

BASELINE T1

REPLICATION T2

ANALYSES



H1. Fisheries Impacts

- Landings 2009 – 2012/16
- Revenue 2009 – 2012/16
- Expectations, 2010

Landings 2013/16 – 2019
Revenue 2013/16 – 2019

DOD with T/C communities
or MANOVA by Port/Fishery



H2. Community Impacts

- Earned Income 2009 – 2012/16
- Per Capita Income – Same dates
- Unemployment, Poverty – Same

**STAC + SOCIAL
SCIENCE TEAM**



H3. Knowledge and Suppo

- OSU MR Surveys, 2013/16
- OSU SWB Surveys, 2016/18
- ODFW Visitor Surveys, 2012/16



H4. Individual Impacts

- TEK report
- Expectations, 2010
- Pilot, 2015/6

Replication, 2019 (?)
Perceived Impacts, 2018 (Quant)
Perceived Impacts, 2018 – 2019

Interpretive
N/A, 2010 descriptive
Interpretive



Q6 Analyses: Non-market Values

Ecosystem Services Projects:

PSU PPGIS Survey

OSU BASS Model

**OSU SWB Survey - Choice Experiment
and Willingness to Pay**

OSU Residents Surveys

Questions?

Oregon
Marine Reserves

OregonMarineReserves.com