



# WATER QUALITY TEAM

PORT MOODY ECOLOGICAL SOCIETY CULTURAL PROBES

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# WATER QUALITY TEAM

ABOUT PORT MOODY ECOLOGICAL SOCIETY

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## WHAT ARE THEY?

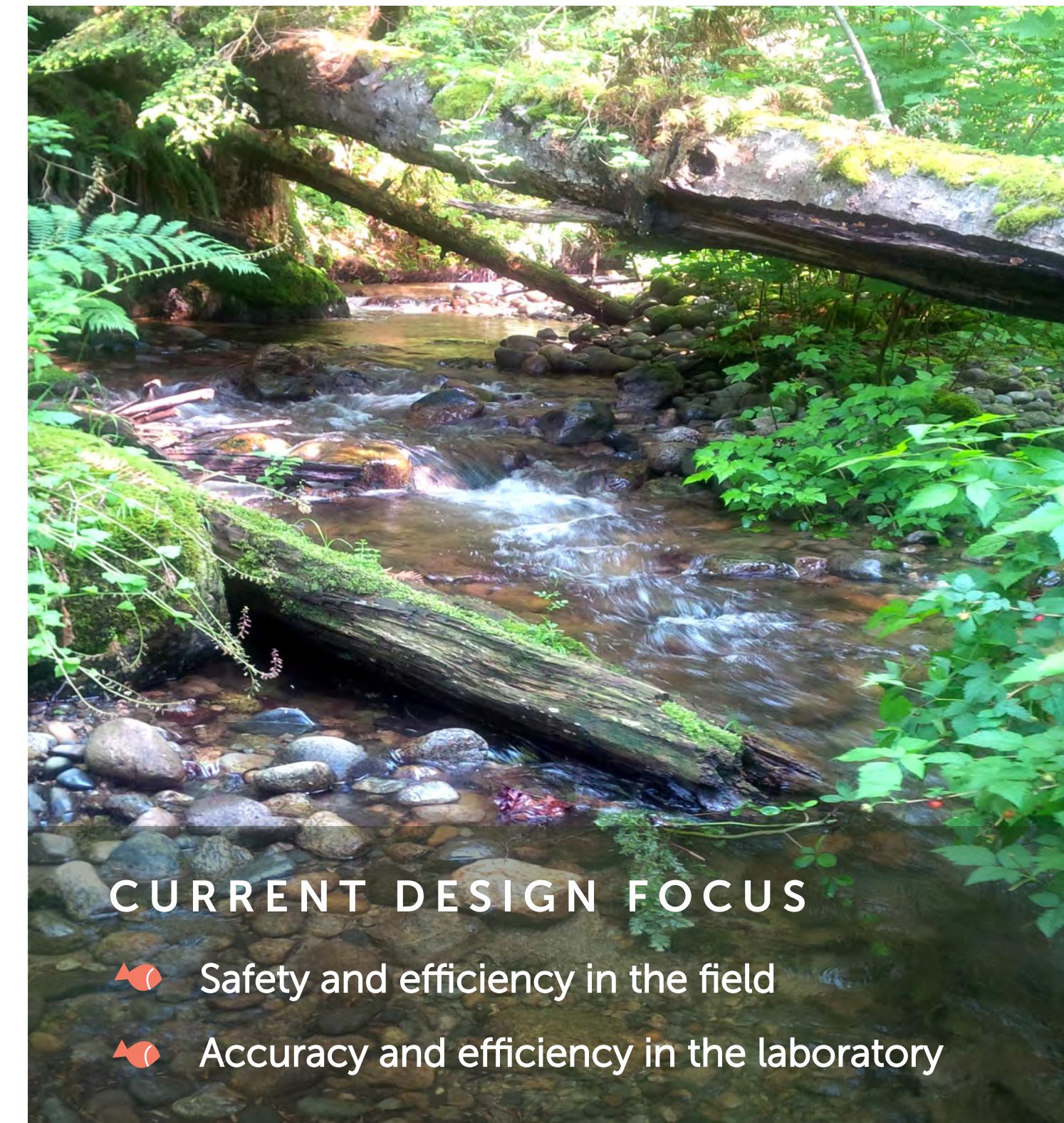
The Port Moody Ecological Society is a volunteer organization that operates a salmon hatchery and water quality testing laboratory.

## WHAT DO THEY DO?

The Water Quality Team meets for 2 hours every Saturday morning to collect and analyze the water quality of the creeks around Burrard Inlet.

## WHAT IS THEIR GOAL?

Their goal is to update the water quality data for the local community and make sure there is nothing wrong with the creeks.



## CURRENT DESIGN FOCUS

- Safety and efficiency in the field
- Accuracy and efficiency in the laboratory

# BACKGROUNDS OF PARTICIPANTS

## CULTURAL PROBES RESEARCH STUDY



### PARTICIPANTS

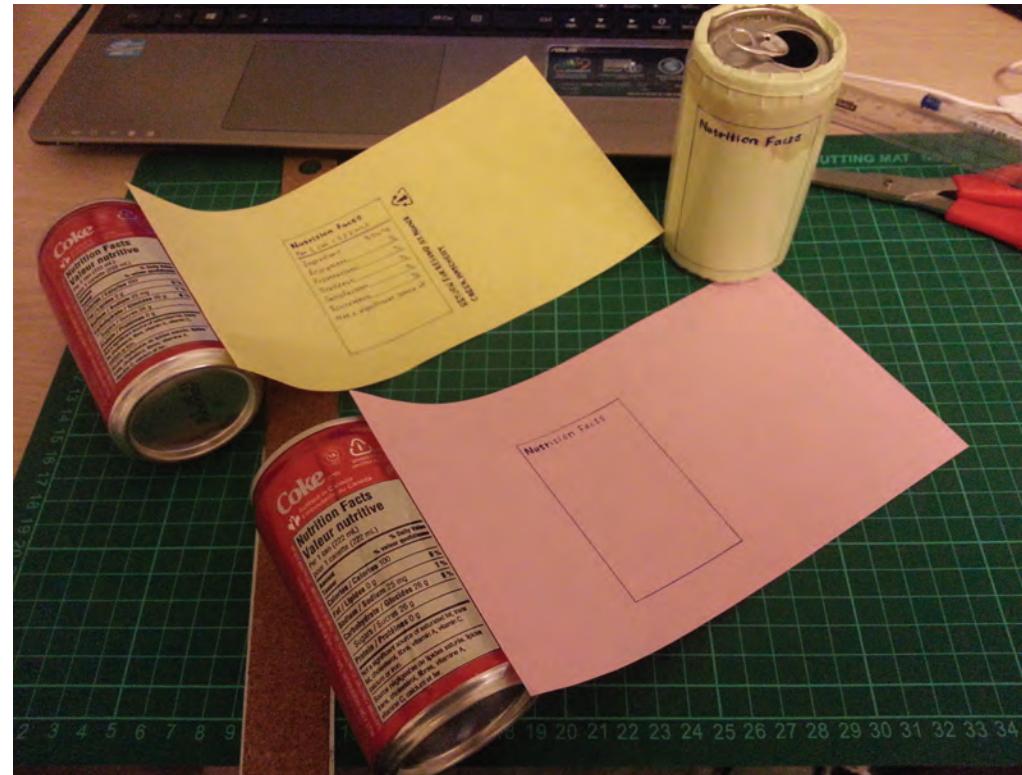
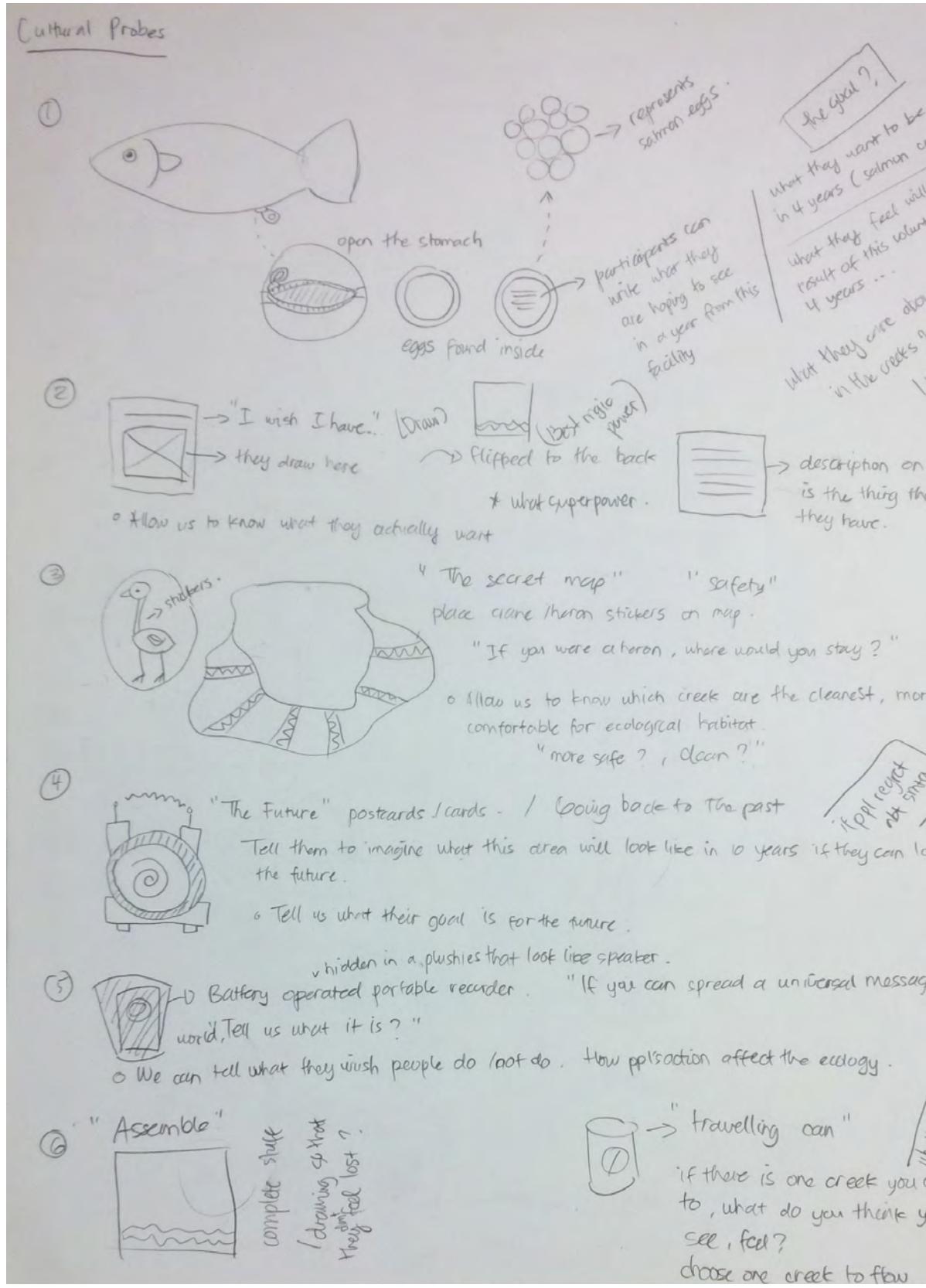
- 4 participants
- 2 males, 2 females
- Ages 17 - 64
- Interested in sciences

### RESULTS

- 3 / 4 participants completed the cultural probe kit
- 1 of the participants did not feel comfortable and therefore did not complete the kit
- Only able to interview 1 / 3 participants after they completed the kit due to time constraint

# THE MAKING OF CULTURAL PROBES

## DESIGN PROCESS



# CULTURAL PROBES KIT

## VARIOUS OBJECTS INSIDE PROBES KIT

- Only 1 kit is fully completed
- The other 2 kits are incomplete due to the time constraints

Legendary  
Self-Expression Box



Limited Edition  
Game Cards



DIY Pop Can



Messages in  
Hidden Eggs



Newsflash  
Tomorrow



Sacred Map  
of the Creeks

# SACRED MAP OF THE CREEKS

## PICK YOUR SPOTS

### INSTRUCTION

"Place each sticker on the area you believe is best suited for it. Please briefly explain the reason behind your placements using the post-it notes. We've also given you two empty stickers that you can add yourself if you like!"

### GOAL

Gather more information about the creeks and their environment

### DESIGN FOCUS

- ❖ Safety and efficiency in the field
- ❖ Open-ended, with intent on seeing how participants perceive the surroundings



# SACRED MAP OF THE CREEKS

## RESULTS AND ANALYSIS



### 3 / 3 PARTICIPANTS COMPLETED THE OBJECT

- 1 participant chose Mossom Creek as dangerous due to steepness
- 2 participants chose south side creeks as they are in danger due to construction
- 1 participant stated that they would not drink from any creek as they drain from residential areas
- Participants marked their favourite spots due to their beautiful scenery

### INSIGHTS

- Concerned with effects of construction on creeks over personal safety
- Common love for the beautiful environment around the creeks

# LIMITED EDITION GAME CARDS

WHAT WOULD YOUR PLAYING CARDS BE?

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## INSTRUCTION

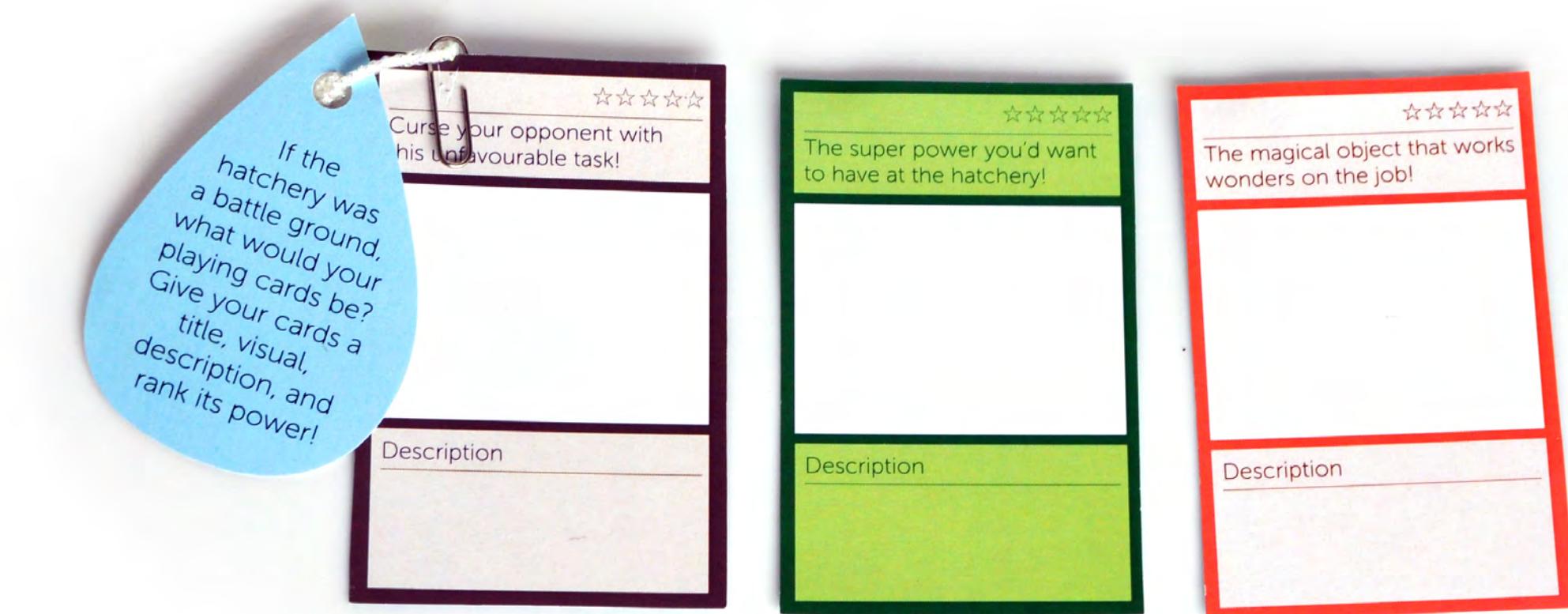
If the hatchery was a battle ground, what would your playing cards be? Give your cards a title, visual, description, and rank its power!

## GOAL

Gain insight on the participant's frustrations and pain points

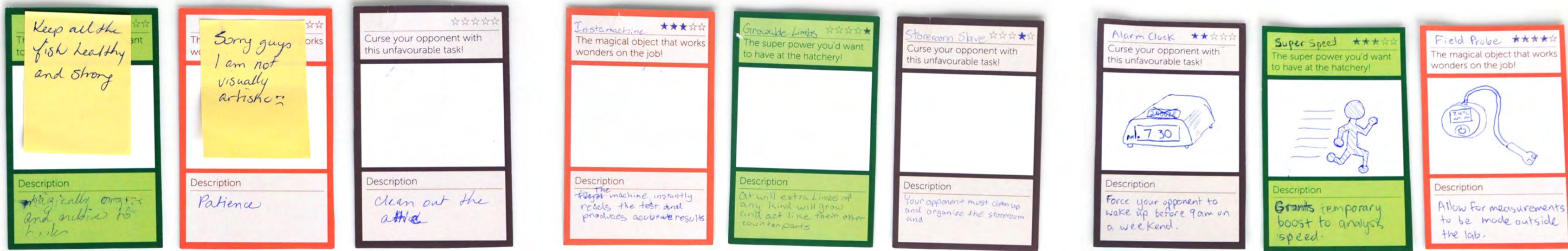
## DESIGN FOCUS

- ❖ Safety and efficiency in the field
- ❖ Accuracy and efficiency in the laboratory



# LIMITED EDITION GAME CARDS

## RESULTS AND ANALYSIS



## 3 / 3 PARTICIPANTS COMPLETED THE OBJECT

- Participants did not enjoy waking up early, cleaning or organizing the laboratory
- Participants wanted tools or super powers that would make analysis and organization more efficient
- 1 participant considered the temperature and oxygen meter to be an important tool

## INSIGHTS

- Efficiency in analysis is desired
- Pain points include tiredness, cleaning and organizing the space

# DIY POP CAN

CREATE YOUR OWN BRAND & FILL IN YOUR "NUTRITIOUS" MOOD FACTS

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## INSTRUCTION

"How do you see yourself in this team? Create your own brand, fill in your "nutritious" mood facts, and any other information you deem important."

## GOAL

Gain an understanding of the participants and their moods when they volunteer at the hatchery

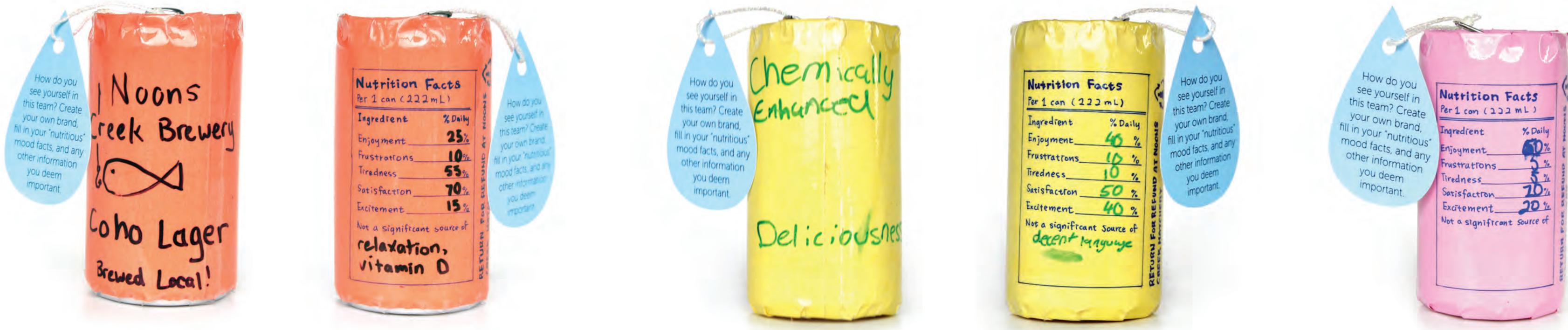
## DESIGN FOCUS

- 👉 Open-ended, with intent on seeing how participants' moods play a role in efficiency in the field and the laboratory



# DIY POP CAN

## RESULTS AND ANALYSIS



### 3 / 3 PARTICIPANTS COMPLETED THE OBJECT

- Percentages for enjoyment, satisfaction and excitement are generally higher than frustrations and tiredness
- 1 participant made sure that the percentages added up to 100%

### INSIGHTS

- Positive emotions overpower the frustrations and pain points

# LEGENDARY SELF-EXPRESSION BOX

EXPRESS YOURSELF IN THE 4 GIVEN CONTEXTS

## INSTRUCTION

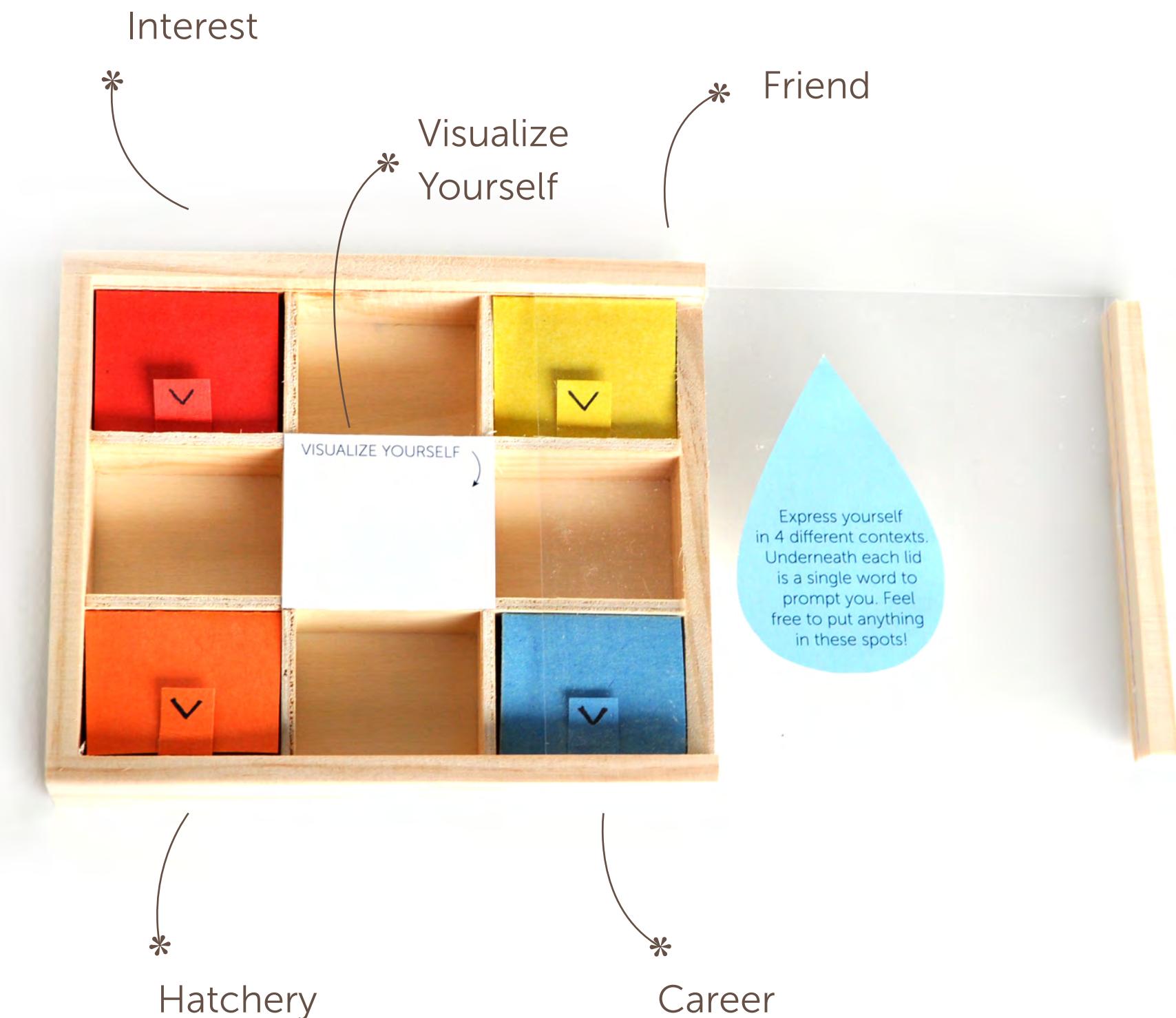
"Express yourself in 4 different contexts. Underneath each lid is a single word to prompt you. Feel free to put anything in these spots!"

## GOAL

Gain a better understanding of the participant in different contexts, including the hatchery

## DESIGN FOCUS

- 👉 Open-ended, with intent on seeing how participants' roles in different contexts relate to safety in the field and accuracy in the laboratory



# LEGENDARY SELF-EXPRESSION BOX

## RESULTS AND ANALYSIS



### 2 / 3 PARTICIPANTS COMPLETED THE OBJECT

- 1 participant put two objects into the box - a fish pin and bead
- Many answers were related to the sciences despite the different contexts
- Participants value the friendships made at the hatchery

### INSIGHTS

- Passion in the sciences extend to several aspects of their lives
- Working towards a common goal created meaningful friendships

# NEWSFLASH TOMORROW

IF THE HATCHERY MADE IT ON THE NEWS, WHAT WOULD IT BE ABOUT?

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## INSTRUCTION

"Noons Creek Hatchery gets the opportunity to be on a newspaper! What will it be about?"

## GOAL

Gain an understanding of the society's values and hopes for the future

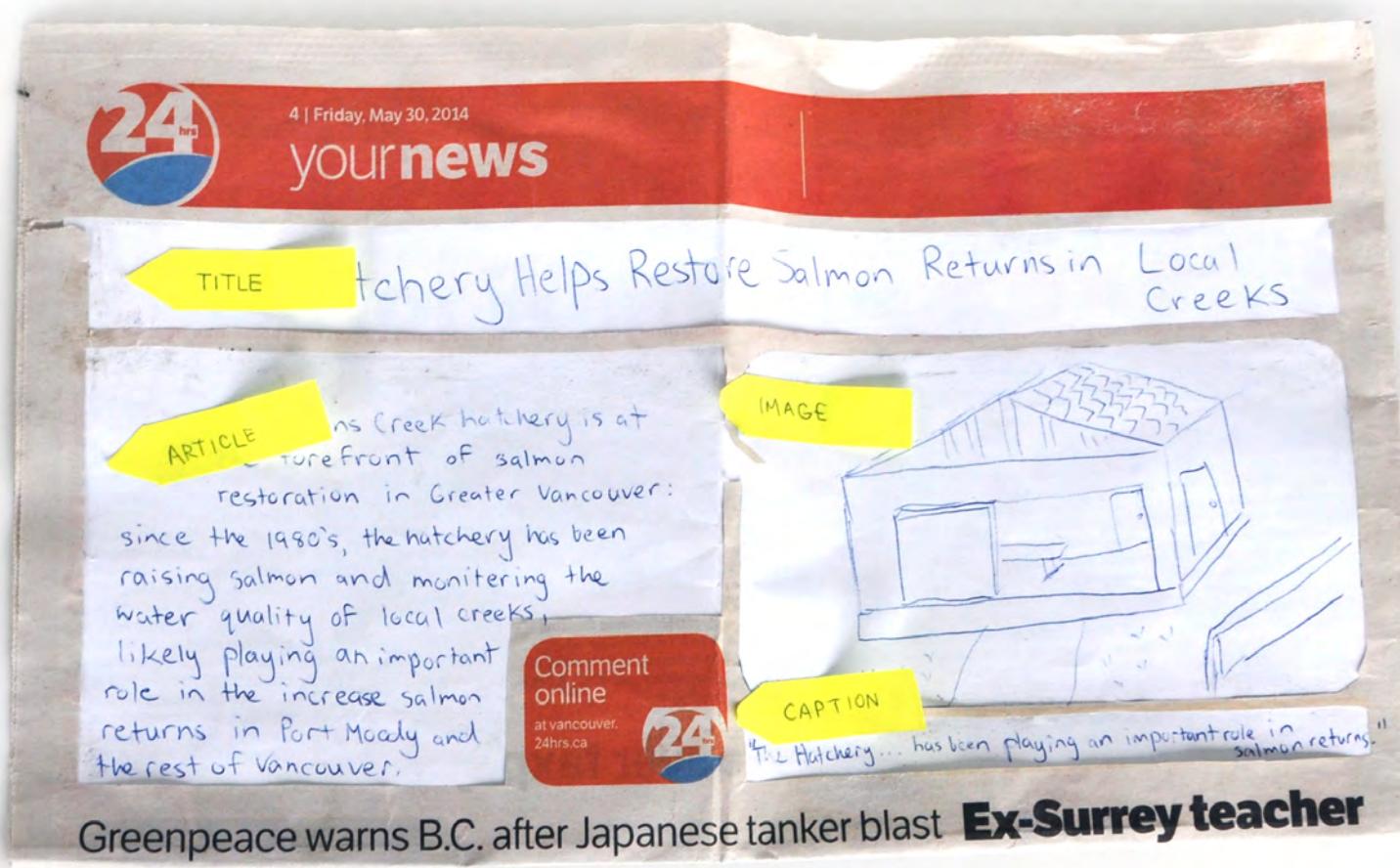
## DESIGN FOCUS

- ➡ Open-ended, with intent on seeing how participants' hopes for the society play a role in the work done in the field and laboratory



# NEWSFLASH TOMORROW

## RESULTS AND ANALYSIS



### 1 / 3 PARTICIPANTS COMPLETED THE OBJECT

- Participants believe that the work they do will have great impact on the salmon (other participant only completed half)
- 1 participant has hopes that the society will do more than just impact the salmon

### INSIGHTS

- Common vision to protect the salmon and the environment
- Common belief that their work will have great impact in the future

# MESSAGE IN HIDDEN EGGS

WHAT YOU THINK OF THIS SOCIETY?

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## INSTRUCTION

- "Put something in here that represents the Port Moody Ecological Society!"
- "Find an image or take a picture of why you want to protect the environment. You can send the image to cishak@sfu.ca or place a copy of the image in this egg."
- "Write a short poem about your experience volunteering at the hatchery. Don't worry, it doesn't have to rhyme and it can be as short as four lines!"

## GOAL

Gain an understanding of the participant's perspective and experience with the hatchery

## DESIGN FOCUS

- Open-ended, with intent on seeing how participants' answers play a role in the work done in the field and laboratory



# MESSAGE IN HIDDEN EGGS

## RESULTS AND ANALYSIS



### 2 / 3 PARTICIPANTS COMPLETED THE OBJECT

- ▶ Participants want to protect the environment because of the water and the fish
- ▶ 1 participant stressed the importance of the friendships in this team
- ▶ 1 participant created a poem that rhymed

### INSIGHTS

- ▶ Common vision to protect the salmon, the water and the environment
- ▶ Working towards a common goal created meaningful friendships

# GENERAL FINDINGS & INSIGHTS SUMMARY

## OVERVIEW OF ALL RESULTS

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### UNEXPECTED FINDINGS

- 👉 Participants did not feel comfortable drawing
- 👉 Only a few objects were placed to complete a probe object
- 👉 The idea of game cards suited the younger generation more

### POSITIVE NOTES

- 👉 Participants were quite surprised when they saw the kit because they thought that it would be purely writing
- 👉 Participants enjoyed completing the probes kit

### INSIGHTS SUMMARY

- 👉 Efficiency in analysis is desired
- 👉 Pain points include tiredness, cleaning and organizing the space
- 👉 Positive emotions overpower the frustrations and pain points
- 👉 Concerned with the effects of construction over personal safety
- 👉 Common vision to protect the salmon and the environment
- 👉 Common belief that their work will have great impact in the future
- 👉 Working towards a common goal created meaningful friendships
- 👉 Passion in sciences extend to several aspects of their lives

# REVISED DESIGN FOCUS

PORT MOODY ECOLOGICAL SOCIETY RESEARCH

## PREVIOUS DESIGN FOCUS

- ❖ Safety and efficiency in the field
- ❖ Accuracy and efficiency in the laboratory

## REVISED DESIGN FOCUS

- ❖ Maximizing their workflow in the laboratory
- ❖ Encouraging interaction between the group and the public

## INSIGHTS SUMMARY

- ❖ Efficiency in analysis is desired
- ❖ Pain points include tiredness, cleaning and organizing the space
- ❖ Positive emotions overpower the frustrations and pain points
- ❖ Concerned with the effects of construction over personal safety
- ❖ Common vision to protect the salmon and the environment
- ❖ Common belief that their work will have great impact in future
- ❖ Working towards common goal created meaningful friendships
- ❖ Passion in sciences extend to several aspects of their lives