

**ATKINS**

# St Lucia Coastal Habitat Mapping Project

Improving Our Understanding through  
training and awareness raising



**ENVISION**



[www.atkinsglobal.com](http://www.atkinsglobal.com)

## Key Concepts of habitat mapping

**ENVISION**  
e n v i s i o n . u k . c o m

Ian Sotheran  
Envision, UK  
[www.envision.uk.com](http://www.envision.uk.com)

# Habitat mapping

- The need for maps
- What is a map?
- How do we make a map?
- What can we use maps for?

## ***The need for maps for coastal zone management***

- Assess ecosystem (e.g. diversity) in a local, regional and international context
- Assess the significance of change
- Anticipate effects of resource utilisation on ecosystems
- Design targeted and cost efficient survey and monitoring
- Integrate environmental priorities into coastal planning

## *Mapping is good science*

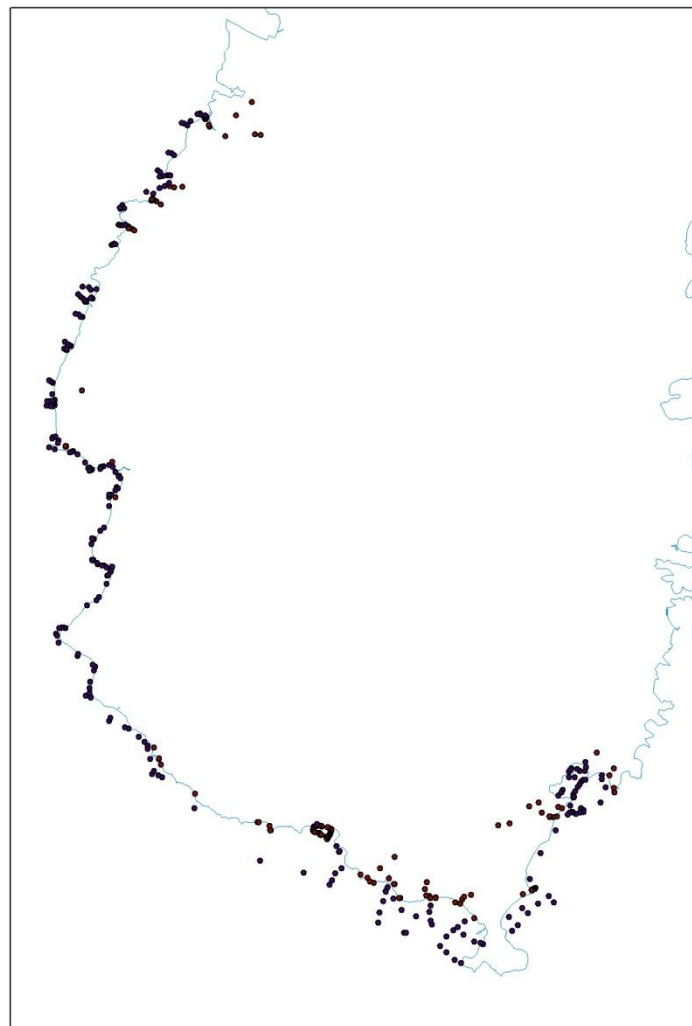
- **Good way of doing surveys**
  - Complete inventory
  - Representative
  - Scale imposes consistency: like compared with like
- **Shows spatial (ecological) patterns**
  - Good basic science that is a foundation for more detailed studies
  - Promotes integrated landscape studies
- **Base maps are a gateway to other information**
  - Gateway to other spatially linked information, such as resource and land use, socioeconomic studies
  - Query map objects to get further information
  - Encourages a multidisciplinary approach to the study of environments

## What is a Map?

- Everyone has a different ideas of a map?
- What do you think a map is?
- What should it show?
- How can you use it?

# What is a map?

- Is this a Map?



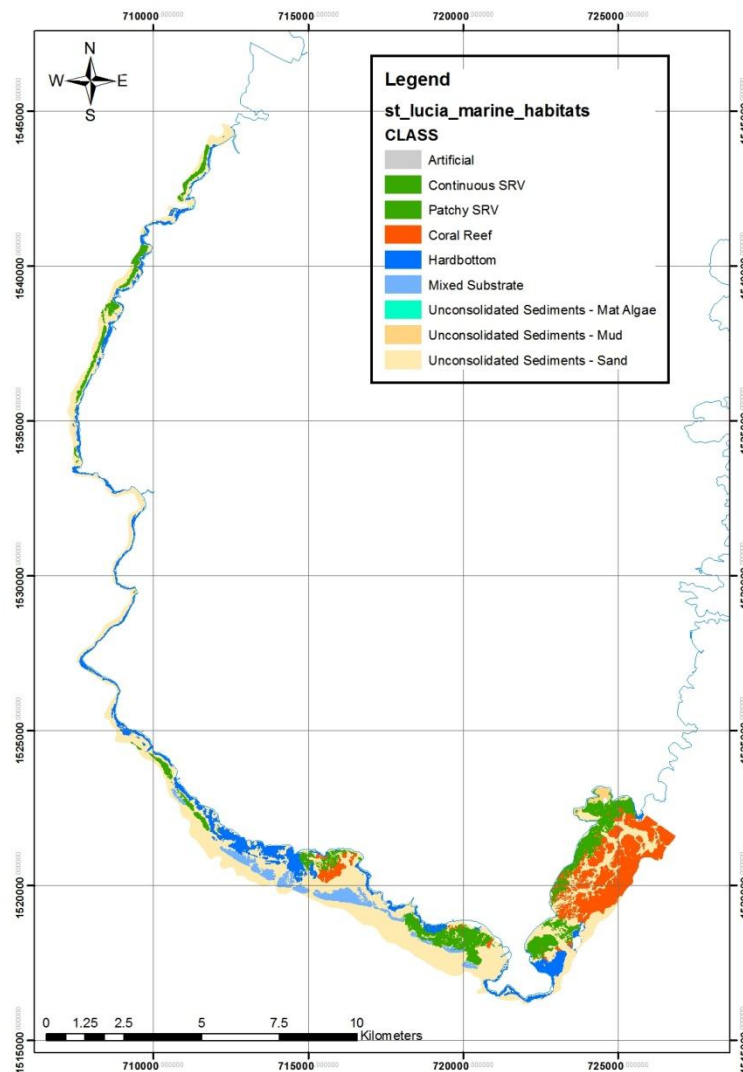
# What is a map?

- Or this?



# What is a map?

- this?





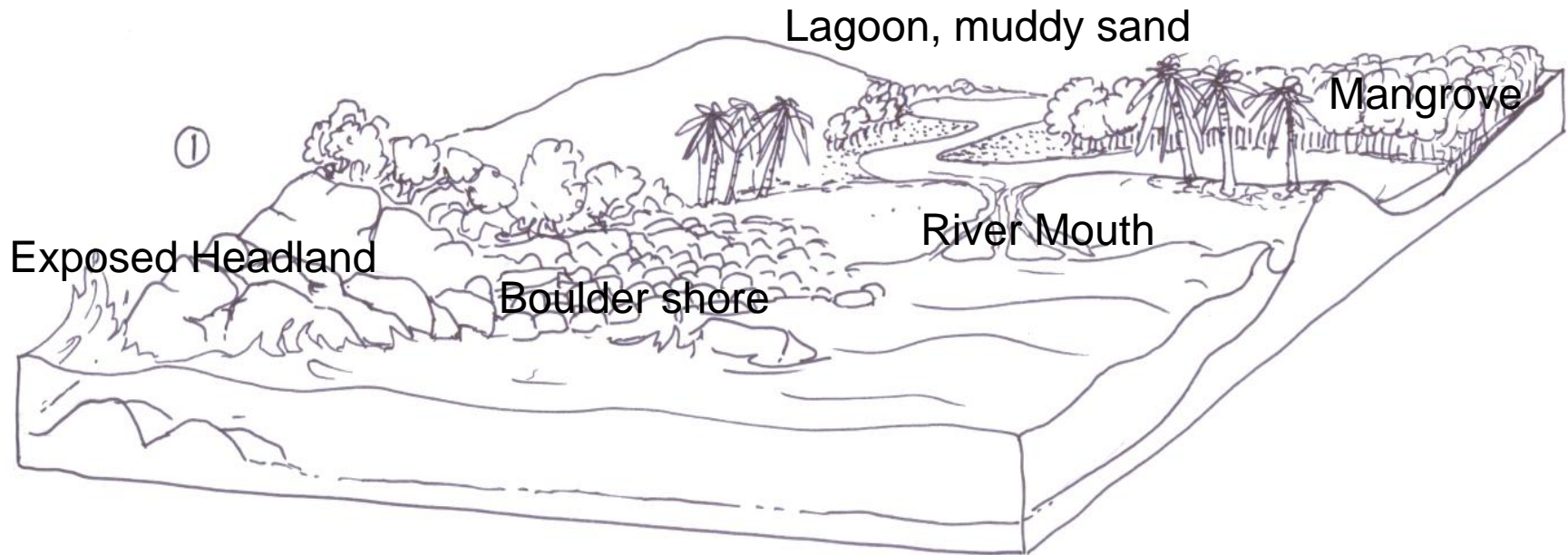
- Or is this what we mean/want?

ALTH_CO	MAPPING_CO	HABITAT_CO	BIOLOGY_CO	BIOLOGY_1
IGRASS	SEAGRASS	MU/SA	SRV	SYG
IGRASS	SEAGRASS	SA	SRV	SYG
IGRASS	SEAGRASS_PATCH	SA	SRV	SYG
IGRASS	SEAGRASS	SA	SRV	SYG
§	UCS_SAND	SA	NOB	RF
§	UCS_ALGAE	SA	SRV	MD
IGRASS	SEAGRASS	SA	SRV	SYG
IGRASS	SEAGRASS	SA	SRV	SYG
IGRASS	SEAGRASS	SA	SRV	SYG
IGRASS	SEAGRASS	SA	SRV	SYG
IGRASS	SEAGRASS	SA	SRV	SYG
§	UCS_SAND	SA	NOB	RF
IGRASS	SEAGRASS	SA	SRV	SYG
IGRASS	SEAGRASS	SA	SRV	SYG
Roame/Rugene/Palmiste	SEAGRASS	SEAGRASS_PATCH	SA/IRMA	THL/GRN
Roame/Rugene/Palmiste	SEAGRASS	SEAGRASS	SA	SYG/THL
Roame/Rugene/Palmiste	SEAGRASS	SEAGRASS	SA	SYG/THL
Roame/Rugene/Palmiste	UCS	UCS_SAND	SA	NOB
Roame/Rugene/Palmiste	SEAGRASS	SEAGRASS	SA	SRV
Roame/Rugene/Palmiste	SEAGRASS	SEAGRASS	SA	SRV
Roame/Rugene/Palmiste	SEAGRASS	SEAGRASS_PATCH	SA	SRV
Roame/Rugene/Palmiste	SEAGRASS	SEAGRASS_PATCH	SA	SRV
Roame/Rugene/Palmiste	SEAGRASS	SEAGRASS	SA	SRV
Roame/Rugene/Palmiste	SEAGRASS	SEAGRASS	SA	SRV
Roame/Rugene/Palmiste		NOTAKE		
Roame/Rugene/Palmiste	UCS	UCS_MUD	MU	INF
Roame/Rugene/Palmiste	UCS	UCS_MUD	MU	INF
Roame/Rugene/Palmiste	UCS	UCS_MUD	MU	INF

## How do we make a map?

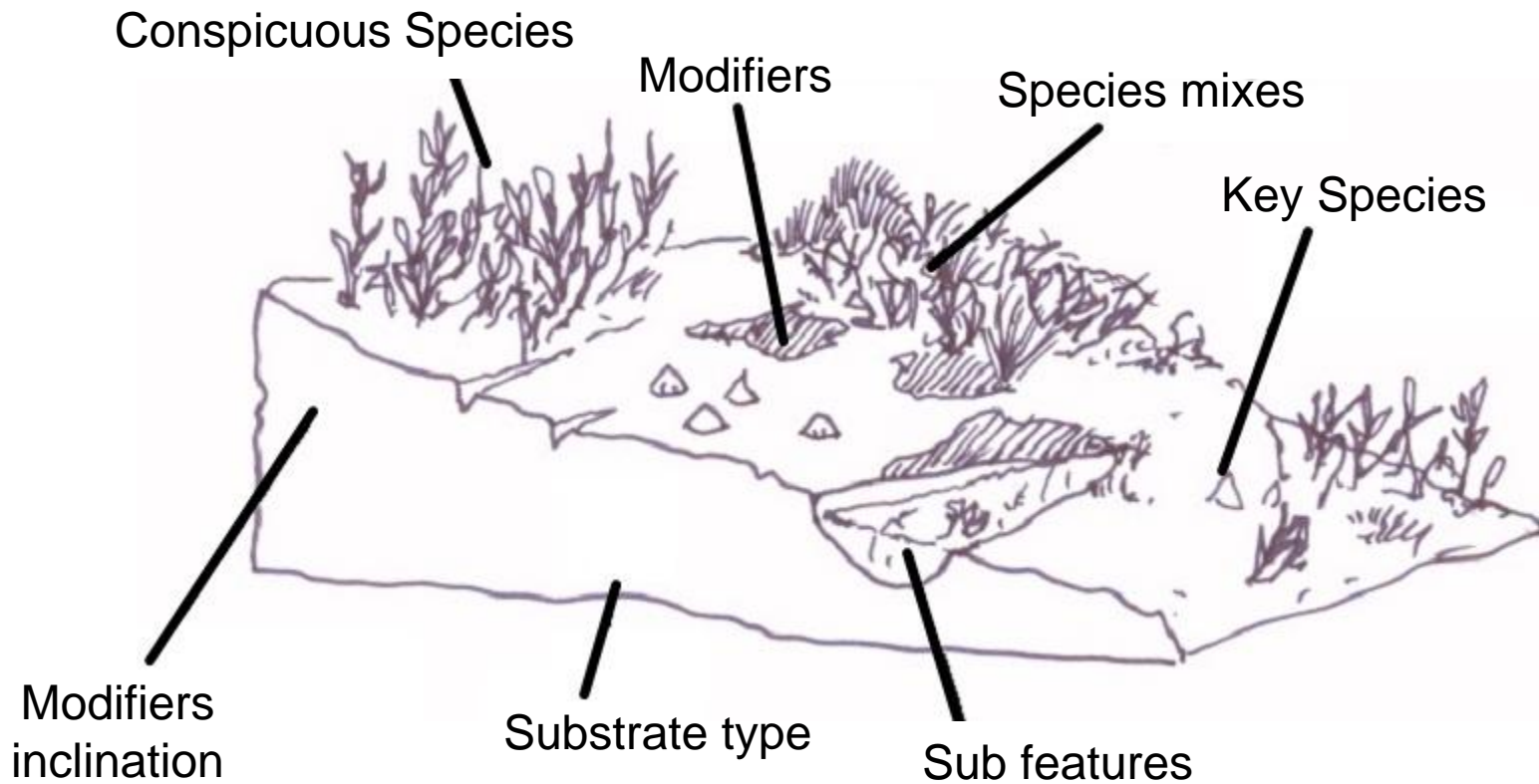
- Knowledge of ecosystems and biology
- A basemap
- Field equipment
- Recording tools
- Database
- Method to relate the field records to images

# Basic Knowledge of Ecosystems & Biology



# Basic Knowledge of Ecosystems & Biology

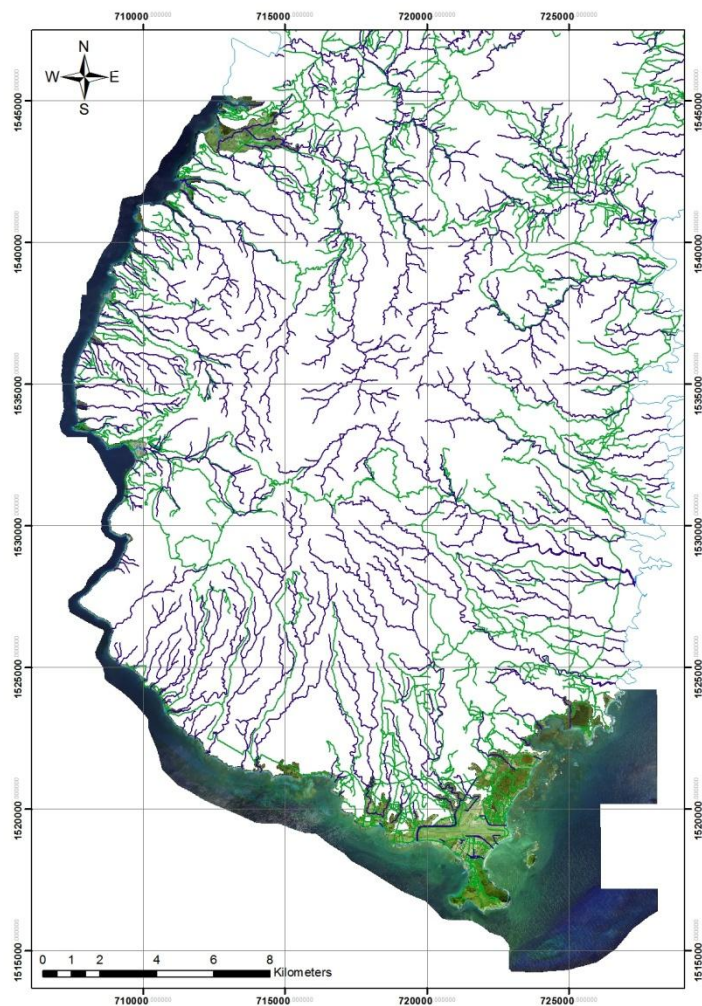
## *Biological Features*



## *Physical Features*



# A basemap



# Field Equipment

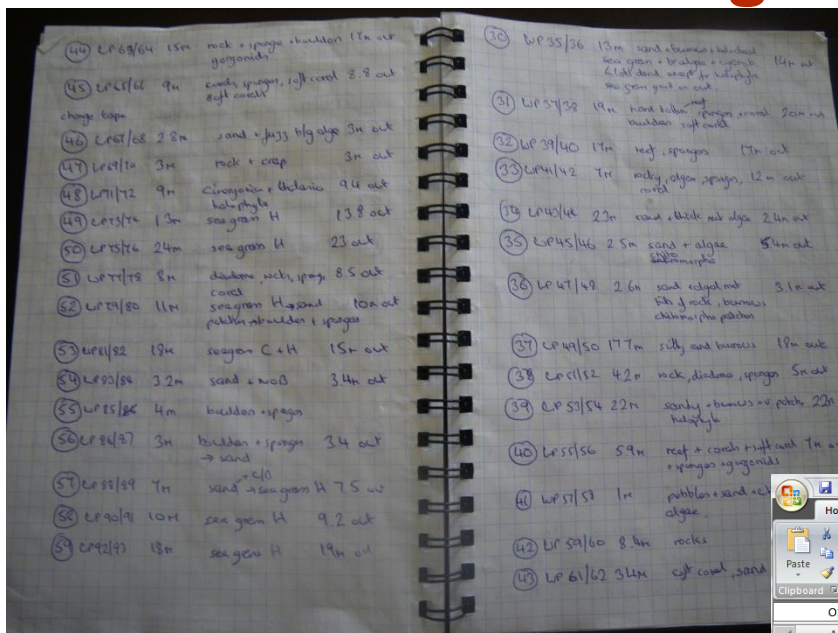




## Field Equipment



# Database & Recording Tools



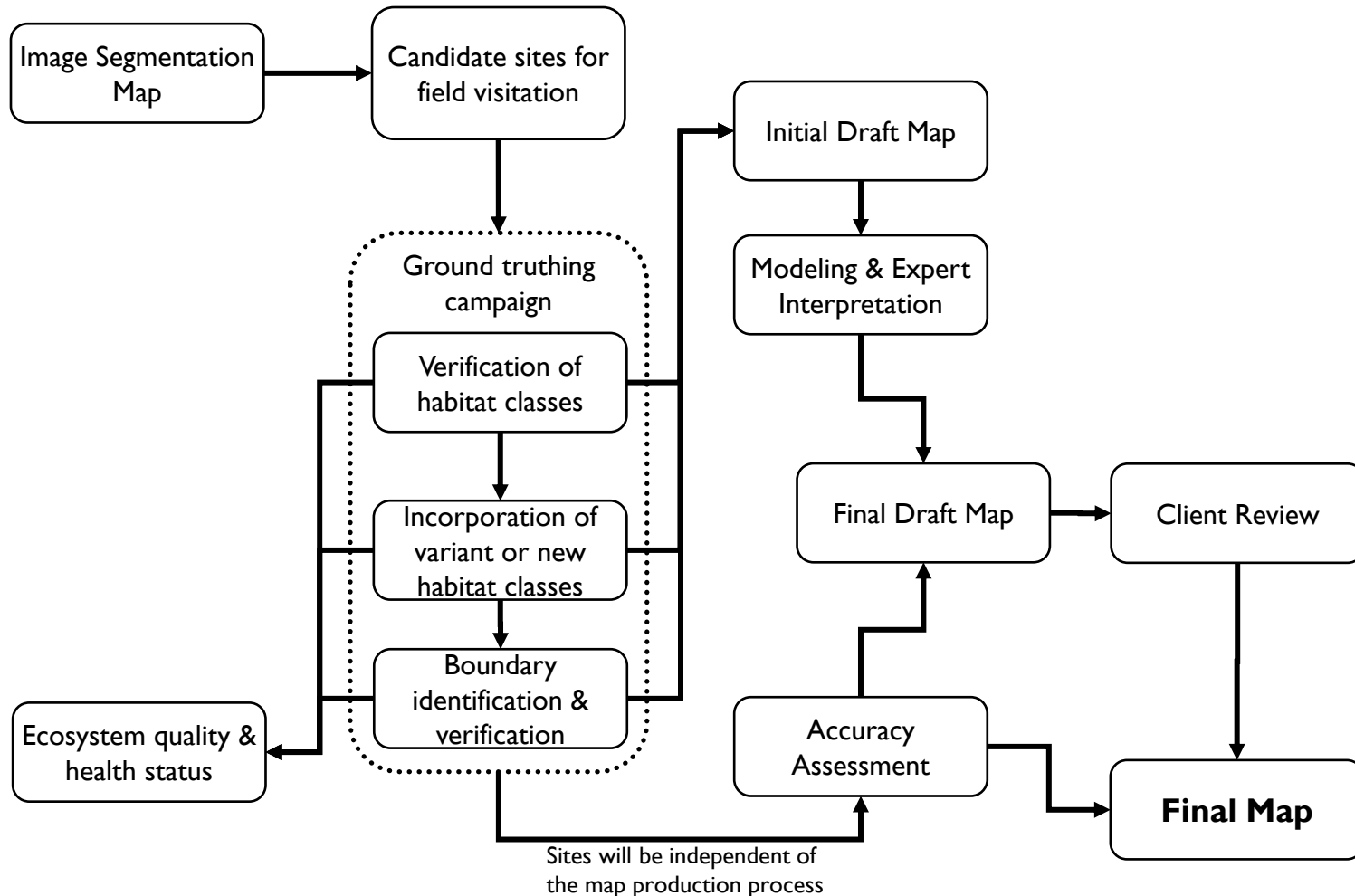
FINAL VIDEO POINTS & CLASSIFICATION v2.xlsx - Microsoft Excel

HomeInsertPage LayoutFormulasDataReviewViewAcrobat

<

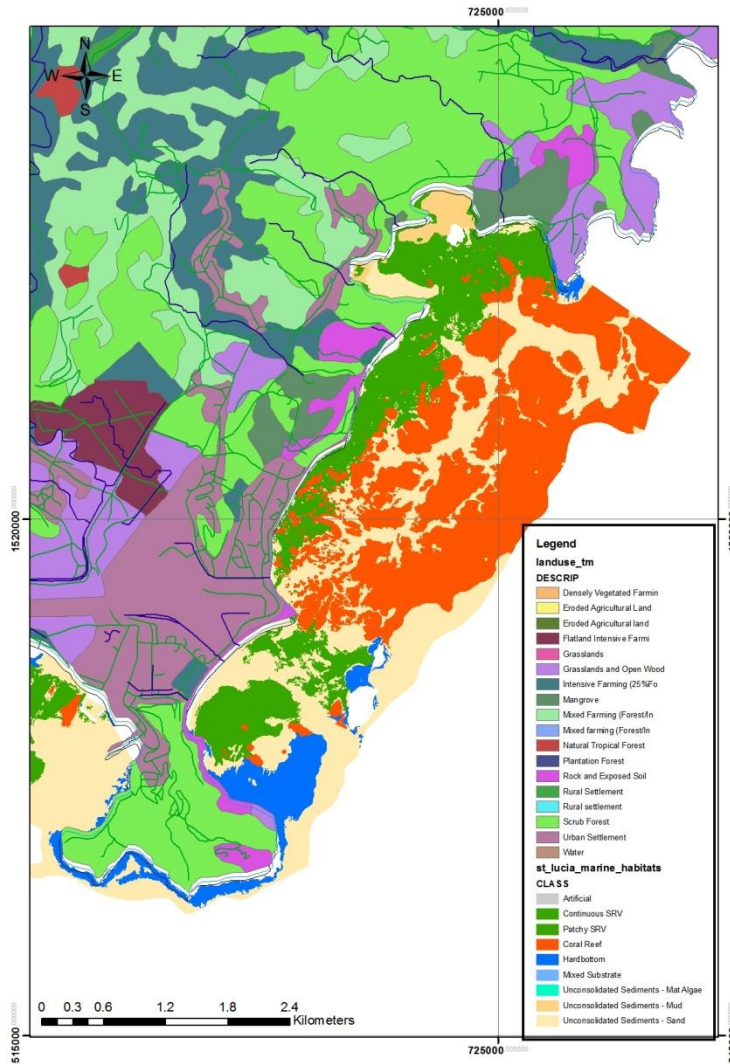


# Joining field records to images



# What can we use maps for?

- Show where things are.
- Base resource map for overlaying other data
- Powerful visual tool for interpretation and management
- plus more....?



# Coastal Habitat Mapping

