# ocean beach

## master plan

**public workshop #2**

SPUR SAN FRANCISCO PLANNING + URBAN RESEARCH ASSOCIATION

june 4, 2011

# contents

# workshop goals

- ✓ **project update:** what have we been doing since our last workshop?
- ✓ **present "test scenarios":** intent, ingredients, structure, disclaimers
- ✓ **break-out session:** discussion of "test scenarios", define preferred direction, discussed evaluation criteria

# project update

# workshop 1
# participation summary

1-day event (jan 15, 2011)

**150+** signed-in

**109** "invested" in priorities

**59** filled questionnaires

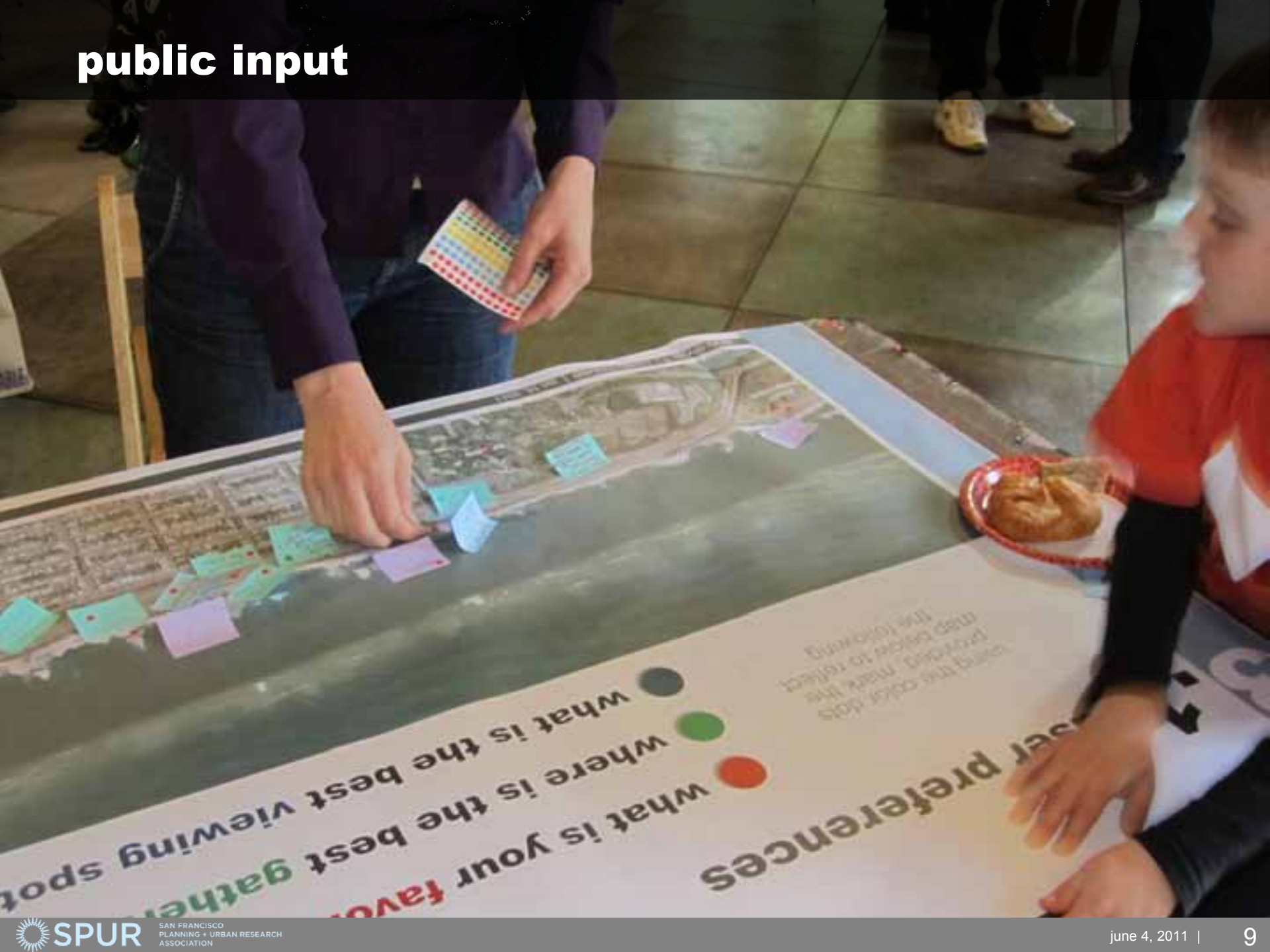
additional input expected from
SPUR exhibit + other outreach

# public input

# public input

# public input

# public input

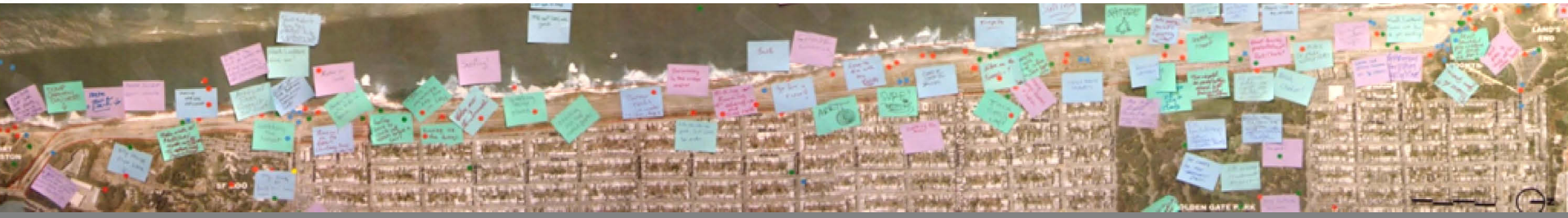


# public input

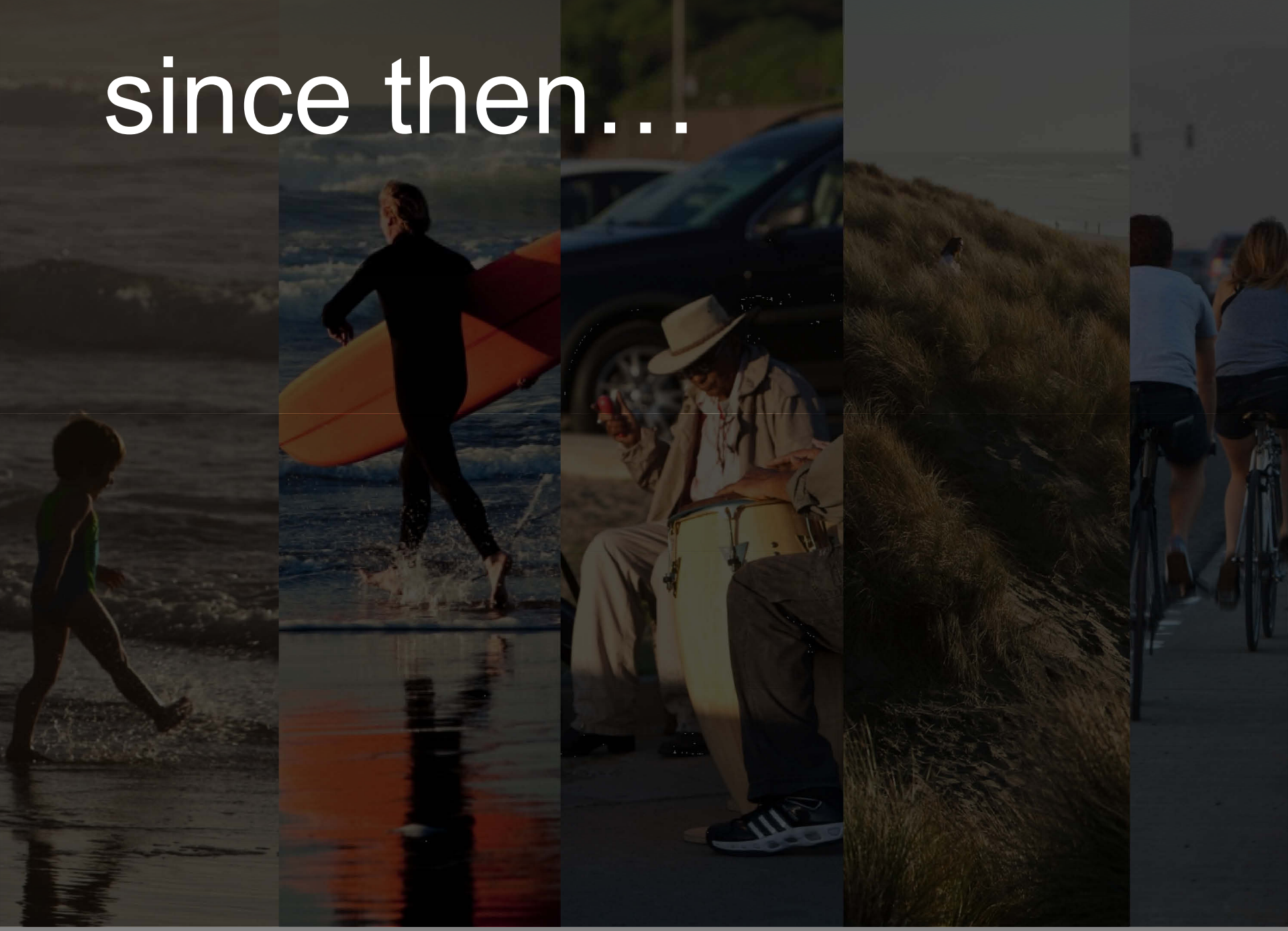
# public input

## image + character

| comment | disagree | somewhat agree | agree | additional comments |
|---|---|---|---|---|
| **raw/open beauty** | | | | |
| More Graffiti | 1 | 1 | 4 | Designated, organized graffiti/street art area |
| Great view opportunity north to Pt. Reyes | | | 1 | |
| Blend the beach environment with neighborhoods, zoo, etc. - no harsh edges | | | 1 | |
| Maintain natural coastline without changing the layout of the environment | | | 1 | |
| Keep Ocean Beach natural | 1 | 1 | 4 | Keep in mind that Ocean Beach is an urban space as well as a natural beach – unlike remote beaches it will never be a pristine environment. |
| Cultural and natural history of the site | | | 1 | |
| OB Can be a World Class Beach in a World Class City | | | 1 | |
| Need analysis on how the neighborhood and people connect emotionally, physically and ecologically to their backyard! | | | 1 | |
| Nice to have such a remote wild-feeling place near the city | | | 4 | |
| Keep GGP natural | | | 1 | |
| too many scary vagrants in the morning | 2 | | 1 | Need more amenities [*unreadable* ] + homeless, homeless people have always been part of the neighborhood and were tolerated/accepted. |
| No dramatic change, improvements & restoration only | | | 3 | |
| Concern about wilderness/ culture of the place being lost | | | 1 | |



# since then…



# confirmed **overall vision statement**

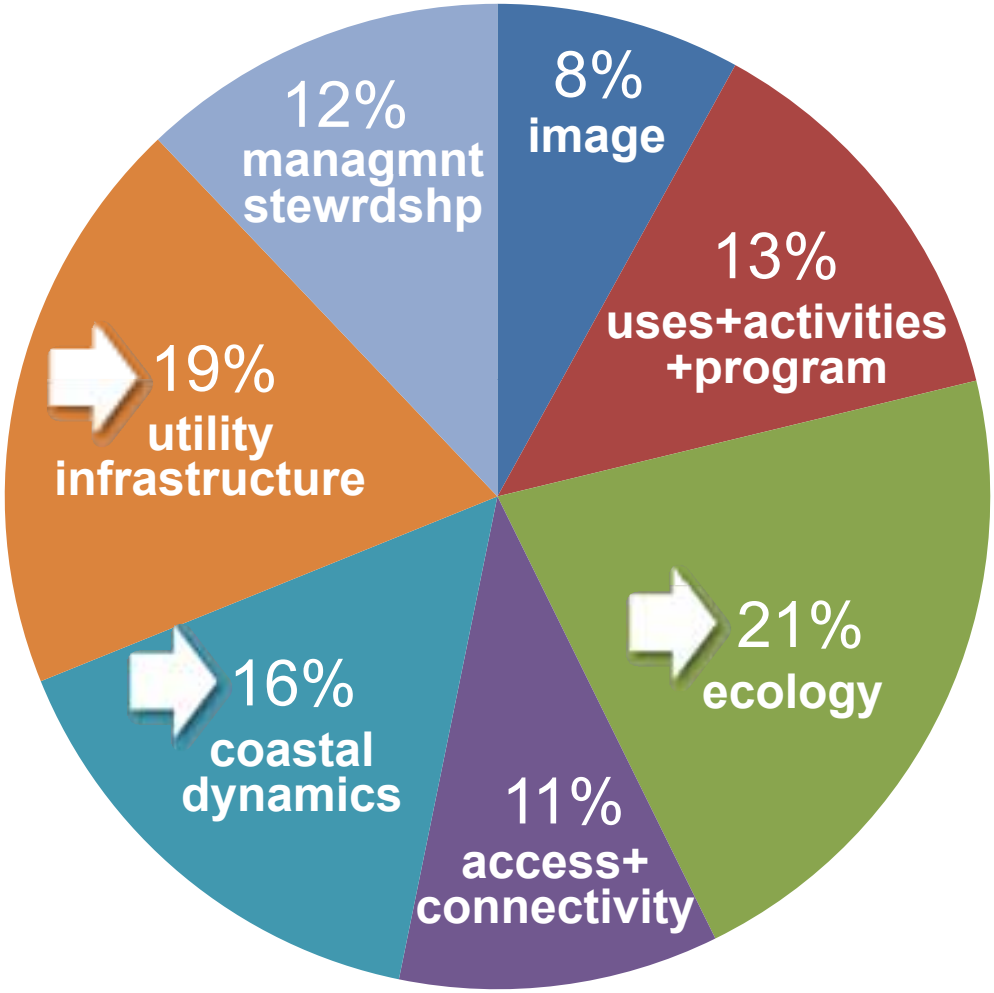
**“to knit the unique assets and experiences of ocean beach into a seamless and welcoming public landscape, planning for recreation, environmental conservation, sustainable infrastructure, and long-term stewardship”**

# prioritized **7 focus areas**

- ✓ **ecology**
- ✓ **utility infrastructure**
- ✓ **coastal dynamics**
- ✓ **access + connectivity**
- ✓ **image / character / culture**
- ✓ **uses / activities / program**
- ✓ **management + stewardship**

# prioritized **focus areas : setting the foundation**

- ✓ **ecology**
- ✓ **utility infrastructure**
- ✓ **coastal dynamics**
- ✓ **access + connectivity**
- ✓ **image / character / culture**
- ✓ **uses / activities / program**
- ✓ **management + stewardship**




**“investment” exercise results**

# refined **aspirations**

- ✓ **ecology**

*restore and establish conditions that support thriving biological communities*

- ✓ **utility infrastructure**

*evaluate utility plans and needs in light of coastal hazards and uncertainties, and pursue a smart, sustainable approach*

- ✓ **coastal dynamics**

*identify a proactive approach to coastal management, in the service of desired outcomes*

- ✓ **access + connectivity**

*provide seamless and fluid connections to adjacent open spaces, the city, and the region*

- ✓ **image / character / culture**

*preserve and celebrate the beach's raw and open beauty, while welcoming a broader public*

- ✓ **uses / activities / program**

*accommodate the diverse activities people enjoy at the beach, managed for positive coexistence*

- ✓ **management + stewardship**

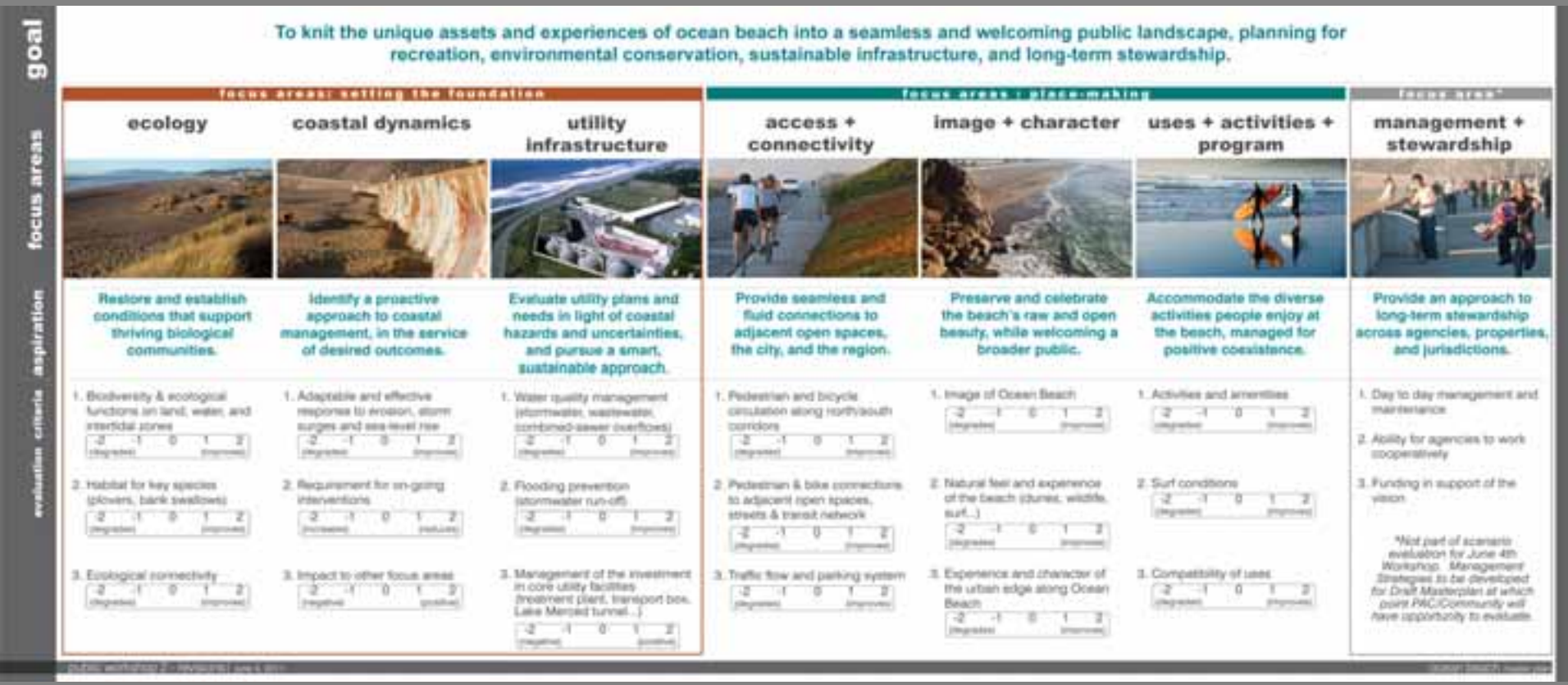
*provide an approach to long-term stewardship across agencies, properties, and jurisdictions*

# defined **evaluation criteria**

## purpose + function

- ✓ basis for evaluating "test scenarios" and later the draft and final master plan
- ✓ based on public input, planning advisory committee (PAC), steering committee

# evaluation criteria



focus areas

aspiration

evaluation criteria

## focus areas: setting the foundation

### ecology

**Restore and establish conditions that support thriving biological communities.**

1. Biodiversity & ecological functions on land, water, and intertidal zones

| -2 | -1 | 0 | 1 | 2 |
|---|---|---|---|---|
| (degrades) | | | | (improves) |

2. Habitat for key species (plovers, bank swallows)

| -2 | -1 | 0 | 1 | 2 |
|---|---|---|---|---|
| (degrades) | | | | (improves) |

3. Ecological connectivity

| -2 | -1 | 0 | 1 | 2 |
|---|---|---|---|---|
| (degrades) | | | | (improves) |

### coastal dynamics

**Identify a proactive approach to coastal management, in the service of desired outcomes.**

1. Adaptable and effective response to erosion, storm surges and sea-level rise

| -2 | -1 | 0 | 1 | 2 |
|---|---|---|---|---|
| (degrades) | | | | (improves) |

2. Requirement for on-going interventions

| -2 | -1 | 0 | 1 | 2 |
|---|---|---|---|---|
| (increases) | | | | (reduces) |

3. Impact to other focus areas

| -2 | -1 | 0 | 1 | 2 |
|---|---|---|---|---|
| (negative) | | | | (positive) |

### utility infrastructure

**Evaluate utility plans and needs in light of coastal hazards and uncertainties, and pursue a smart, sustainable approach.**

1. Water quality management (stormwater, wastewater, combined-sewer overflows)

| -2 | -1 | 0 | 1 | 2 |
|---|---|---|---|---|
| (degrades) | | | | (improves) |

2. Flooding prevention (stormwater run-off)

| -2 | -1 | 0 | 1 | 2 |
|---|---|---|---|---|
| (degrades) | | | | (improves) |

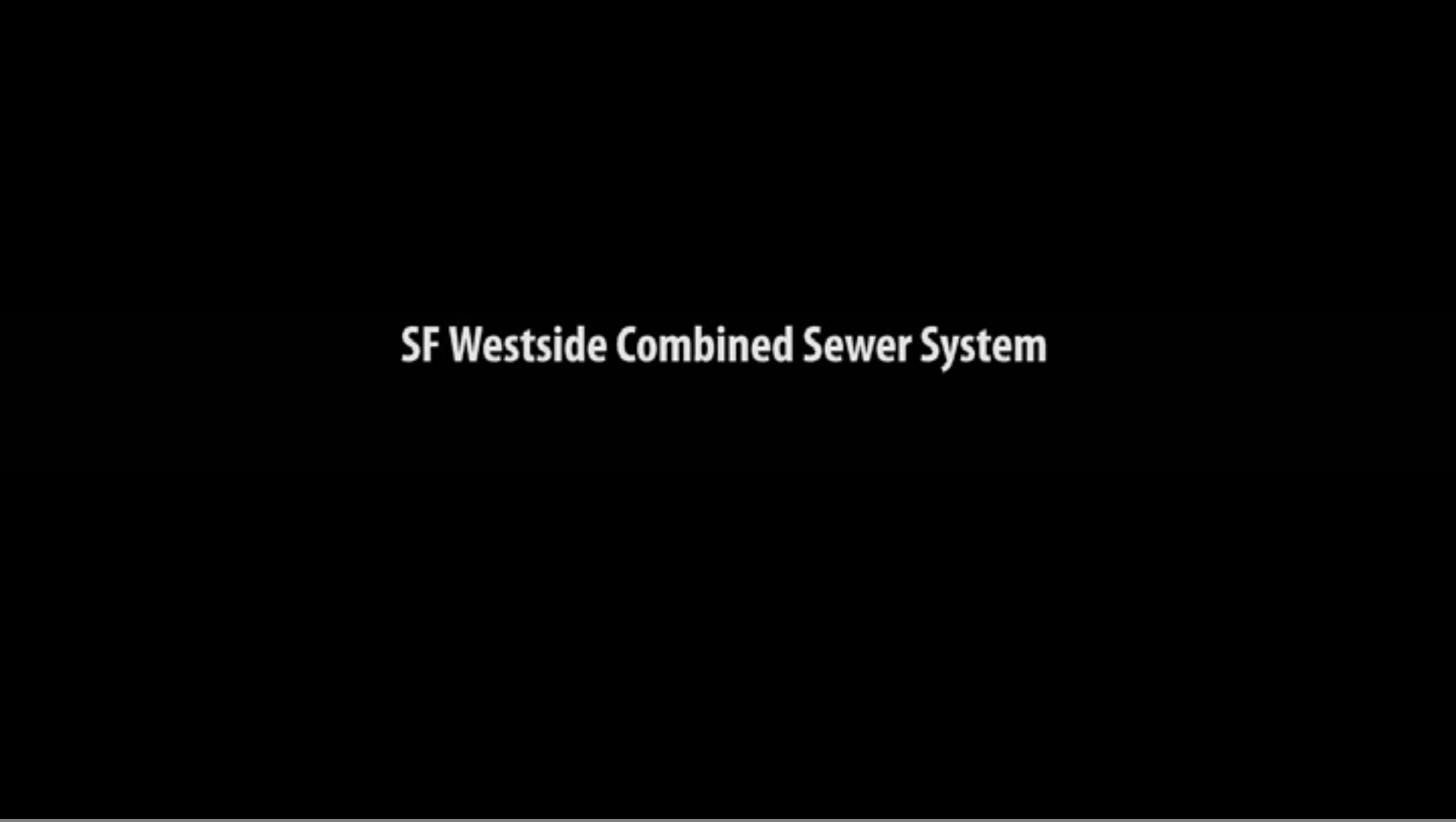
3. Management of the investment in core utility facilities (treatment plant, transport box, Lake Merced tunnel...)

| -2 | -1 | 0 | 1 | 2 |
|---|---|---|---|---|
| (negative) | | | | (positive) |

## site understanding

- ✓ OB coastal dynamics : the littoral cell
- ✓ SF westside combined sewer system


## ✓ OB coastal dynamics : the littoral cell




✓ **SF westside combined sewer system**

# set out to test…

…a wide range of possibilities

…in four “test” scenarios


presentation

# “test scenarios”

## intent

- ✓ explore as many of the ideas suggested by all
- ✓ organize technical work
- ✓ lay out ingredients and tradeoffs that will inform the direction

# “test scenarios”

# disclaimers

- ✓ “test scenarios”, NOT proposals
- ✓ none are the right answer : evaluations reveal strengths and weaknesses in different areas
- ✓ based on shorthand calculations by technical team, not the final word
- ✓ VERY complex challenge : *please bear with us!*

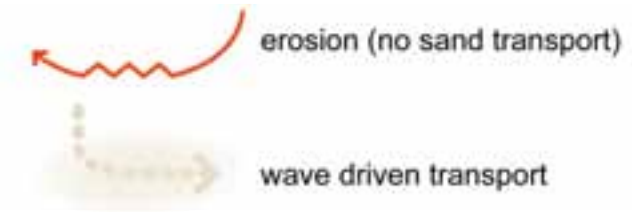
# “test scenarios”

## ingredients

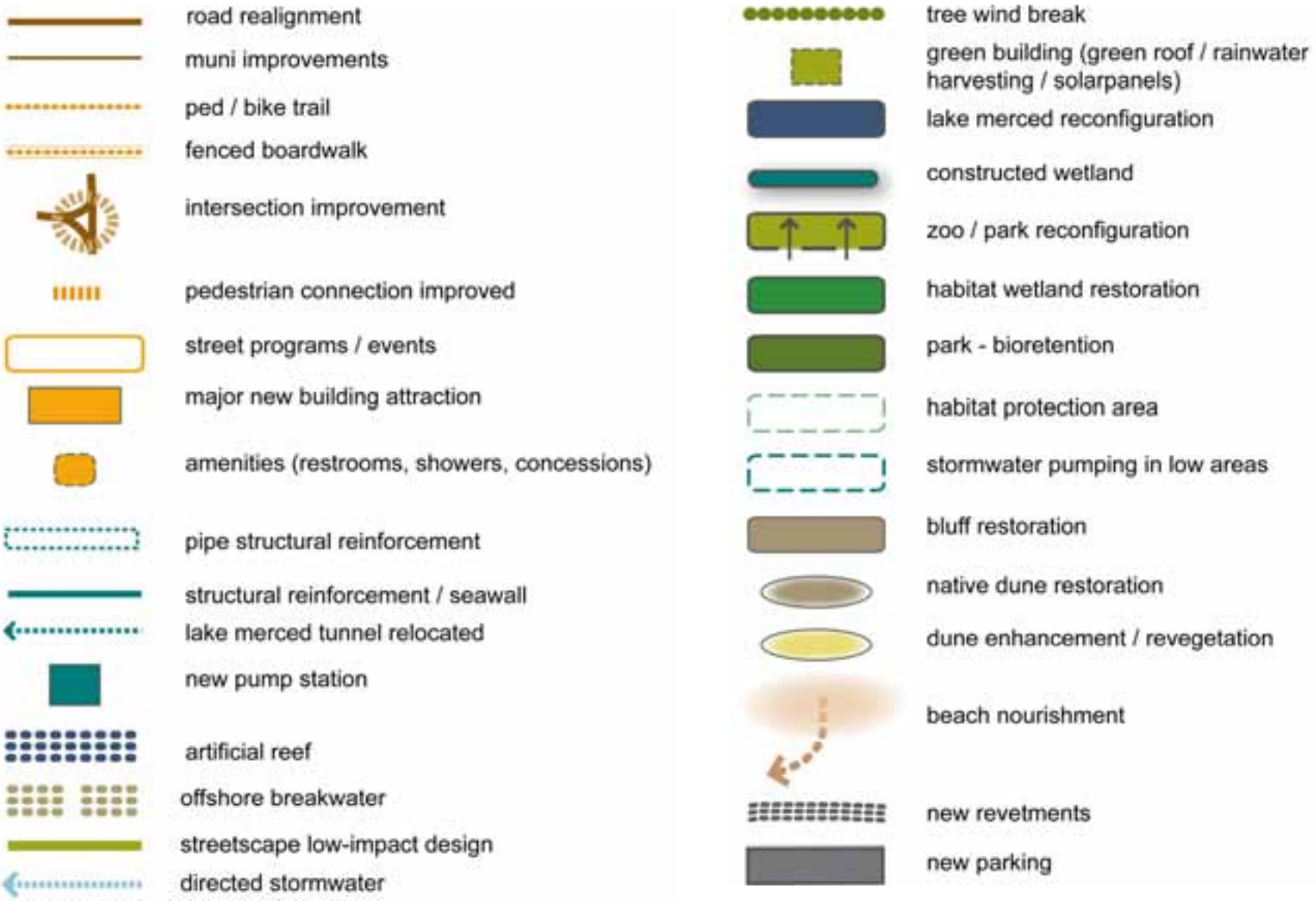
- ✓ existing conditions
- ✓ ongoing processes
- ✓ actions / management / new elements

# ingredients : **existing conditions**

# ingredients **: ongoing processes**



# ingredients **: actions / management / new elements**



# scenario ingredients

✓ **armoring**

revetments, seawall, artificial reefs, breakwaters

(+) protects existing infrastructure

(-) potential for beach / habitat loss

(-) aesthetics / character

## scenario ingredients

✓ **beach nourishment**

PAST : placement of excess/byproduct sand, nearshore placement

POTENTIAL : direct placement, 250-300K cu yd/yr

(+) buys time, aesthetic improvements

(-) limits to protection, doesn't guarantee a beach

(-) ongoing management required

# scenario ingredients

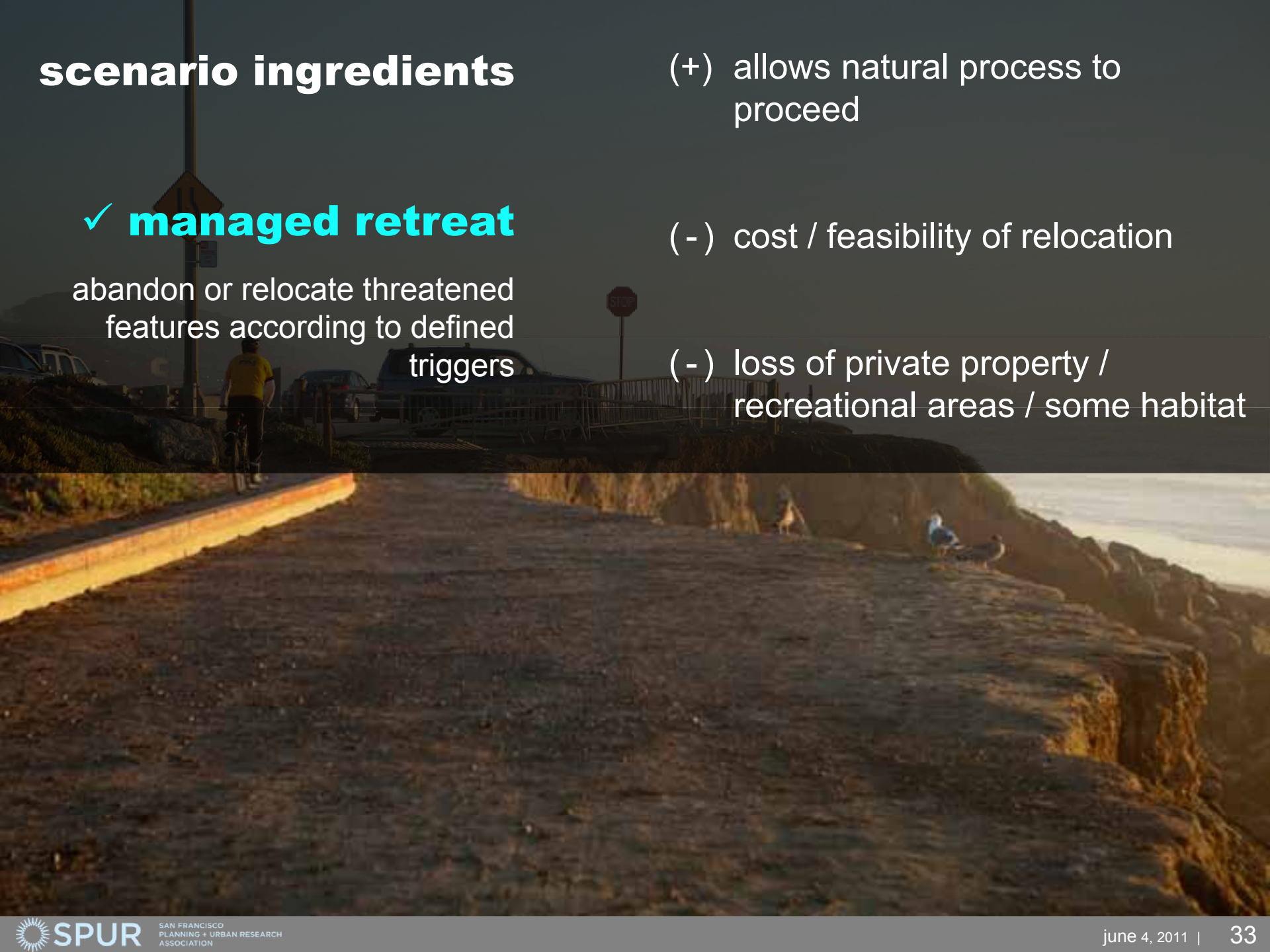
## ✓ managed retreat

abandon or relocate threatened features according to defined triggers

(+) allows natural process to proceed

(-) cost / feasibility of relocation

(-) loss of private property / recreational areas / some habitat



# scenario ingredients

✓ **climate change**
sea level rise (SLR)
+ erosion

7” by 2030
14” by 2050
55” by 2100

(-) erosion will worsen, causing shore recession throughout

(-) storm surges may worsen

# scenario ingredients

✓ **climate change**

changes in precipitation

uncertain

(-) possibly significant increase in typical precipitation

(-) potential negative water quality implications

# scenario ingredients

## ✓ LID
## low impact design

design elements (green roofs, rainwater harvesting, permeable paving, swales and infiltration systems, creek restoration) that restore watersheds to improve stormwater, groundwater, flooding, and ecological performance

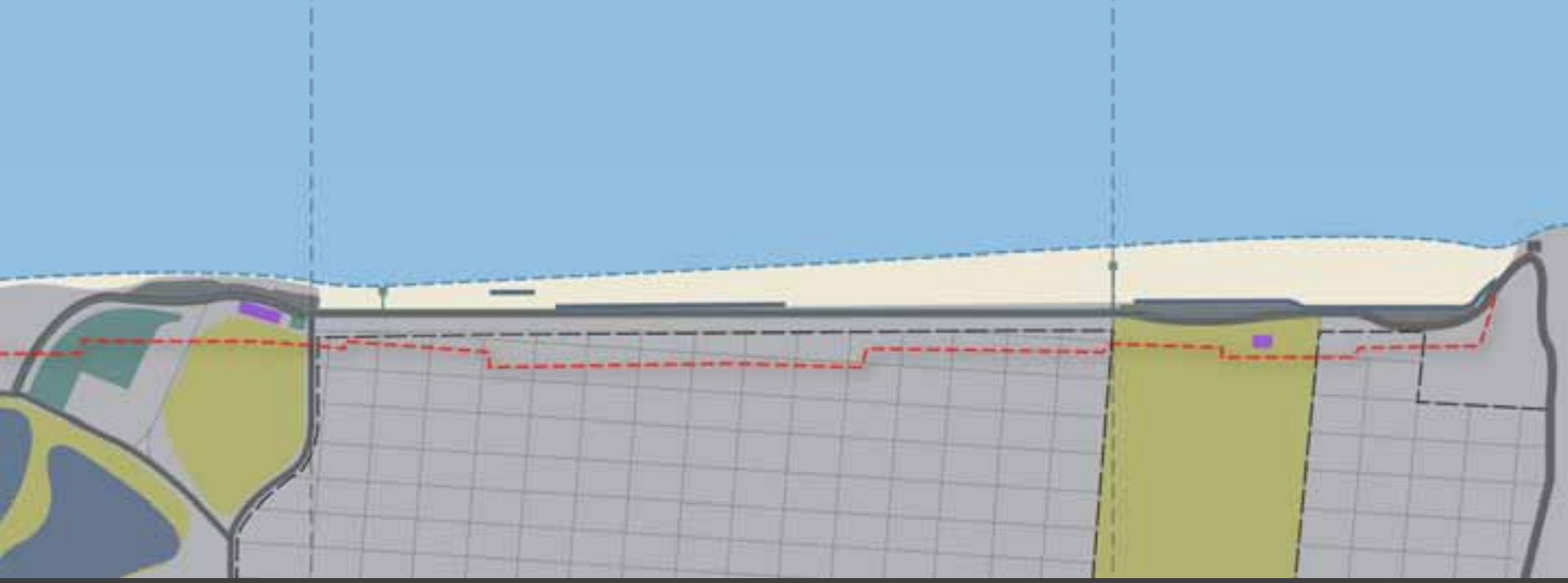
(+) remove stormwater from combined systems, improves resilience

(+) groundwater recharge, flooding prevention

(+) habitat creation, temperature control

(-) up-front cost

(-) limited ability to replace major infrastructure



## scenario ingredients

✓ **coastal hazard zone**
(year 2100)

"place-holder" line based on the Pacific Institute's 2009 SLR study

used in the "test scenarios" to define potential zone of retreat

## scenario ingredients

✓ **land acquisition**
(year 2100)

to maintain a wide beach and allow the development of natural dunes, private homes would need to be acquired

(+) allows natural coastal processes to proceed

(-) loss of private property

# scenario ingredients

## ✓ habitat restoration

### dunes

re-vegetation of existing dunes, or comprehensively restoring them to native form

### bluffs

removal of armoring, allow natural erosion to continue

### lake merced

new habitat form by providing hydrological connection, continuous linkages

(+) improves natural habitat

(+) allows some of the natural processes to proceed

(-) limits some public access

(-) ongoing management required for establishment

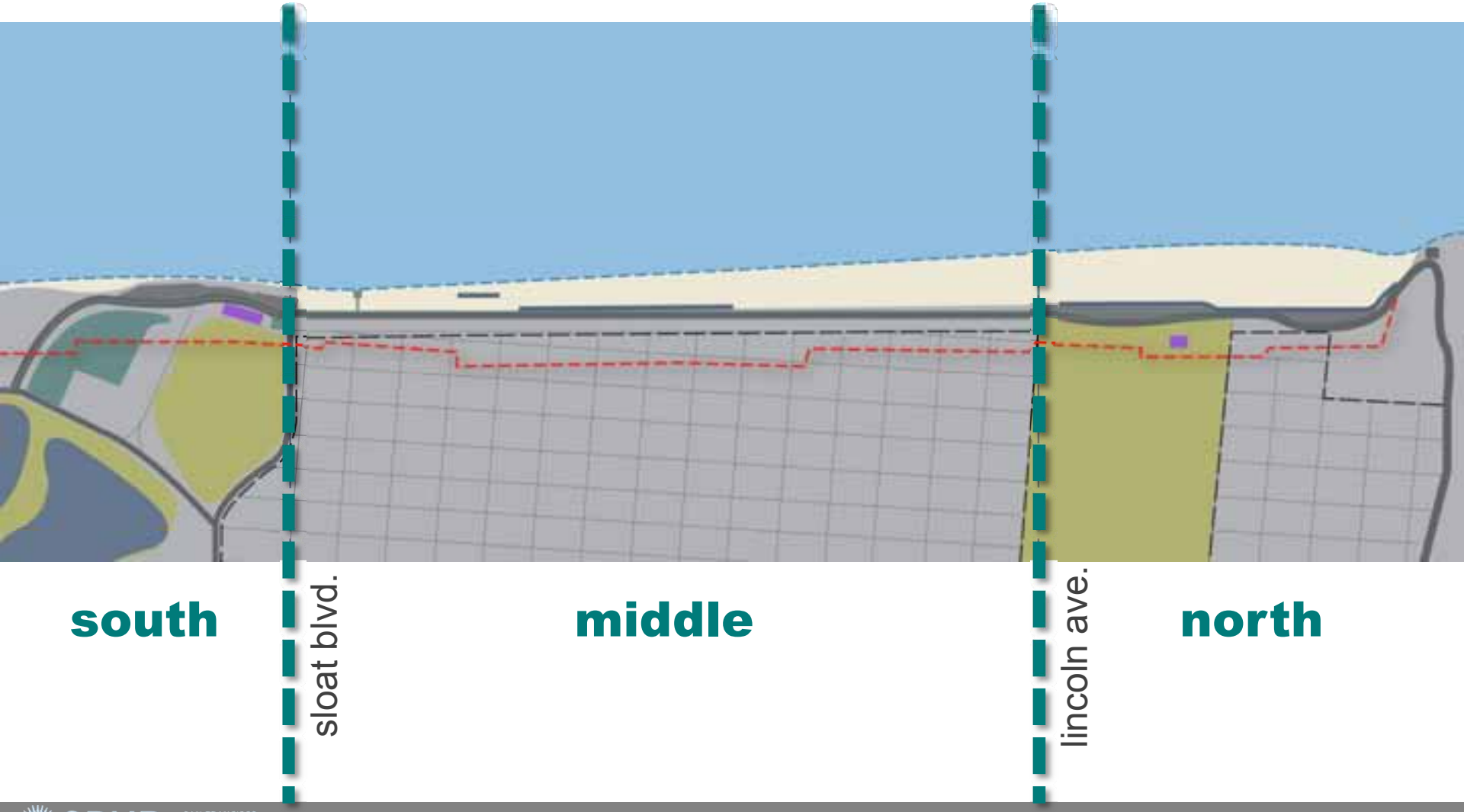
# “test scenarios”

## structure

- ✓ **three (3) reaches :** north, middle, south
- ✓ **four (4) time points :** SLR triggers
- ✓ **four (4) test scenarios :** maximum

# “test scenarios”

## three (3) reaches




**south** **middle** **north**

# “test scenarios”

**four (4) time points**

| | | |
|---|---|---|
| period 1 : **0 to +5 years** | 2010 - 2015 | |
| period 2 : **+5 to +20 years** | 2015 - 2030 | SLR = 7” |
| period 3 : **+20 to +40 years** | 2030 - 2050 | SLR = 14” |
| period 4 : **+40 to +90 years** | 2050 - 2100 | SLR = 55” |

# “test scenarios”

## four (4) maximum scenarios

| A | B | C | D |
|---|---|---|---|
| maximum habitat | maximum recreation | maximum ‘green’ infrastructure | maximum infrastructure |

**each “test scenario” is driven by a *single priority***

*(priorities came from public, PAC, and agencies)*

**emphasis is on foundation-setting focus areas**

*(ecology, utility infrastructure, coastal dynamics)*

# “test scenarios”

## process

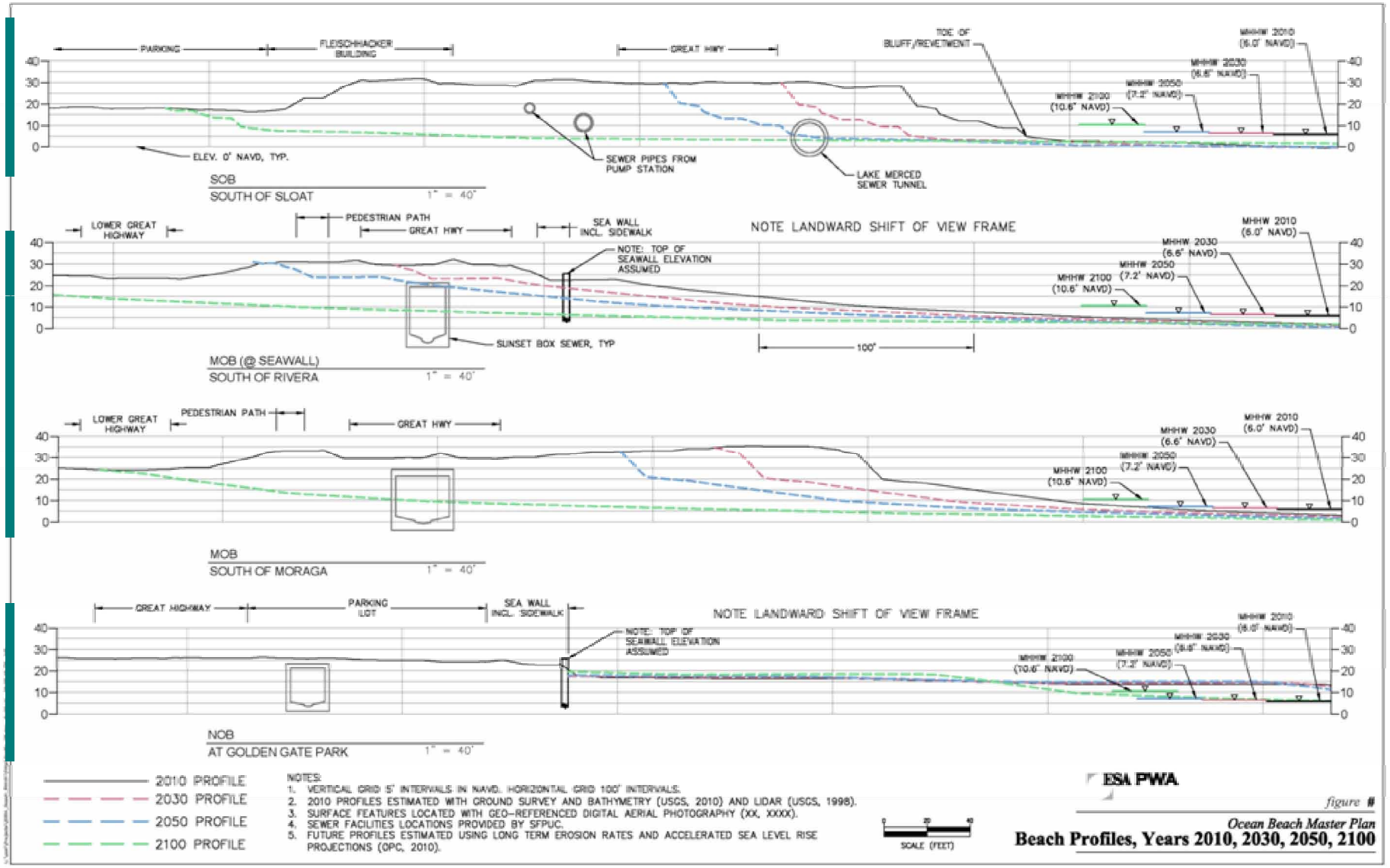
- ✓ **defined priorities :**
  **“why’s?”**
- ✓ **selected actions / ingredients :**
  **“how’s?”**
- ✓ **tested and modeled outcomes**
  - ✓ physical process modeling
  - ✓ benefit-cost analysis (ongoing)

# tested **each scenario**

south

middle

north



# “test scenarios”

# A

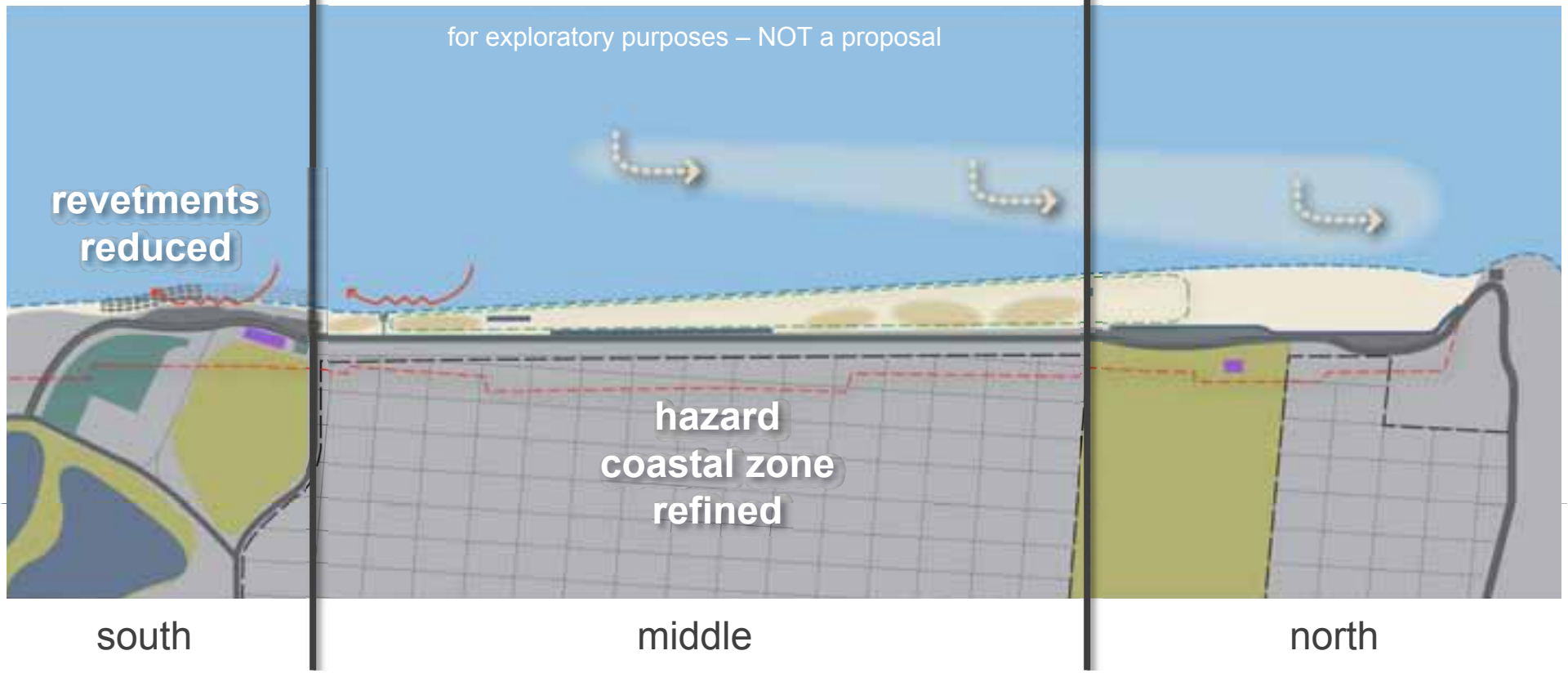
**maximum habitat**

## why?

- ✓ **to increase biodiversity and ecological function at ocean beach**
- ✓ **to allow natural coastal processes to proceed**

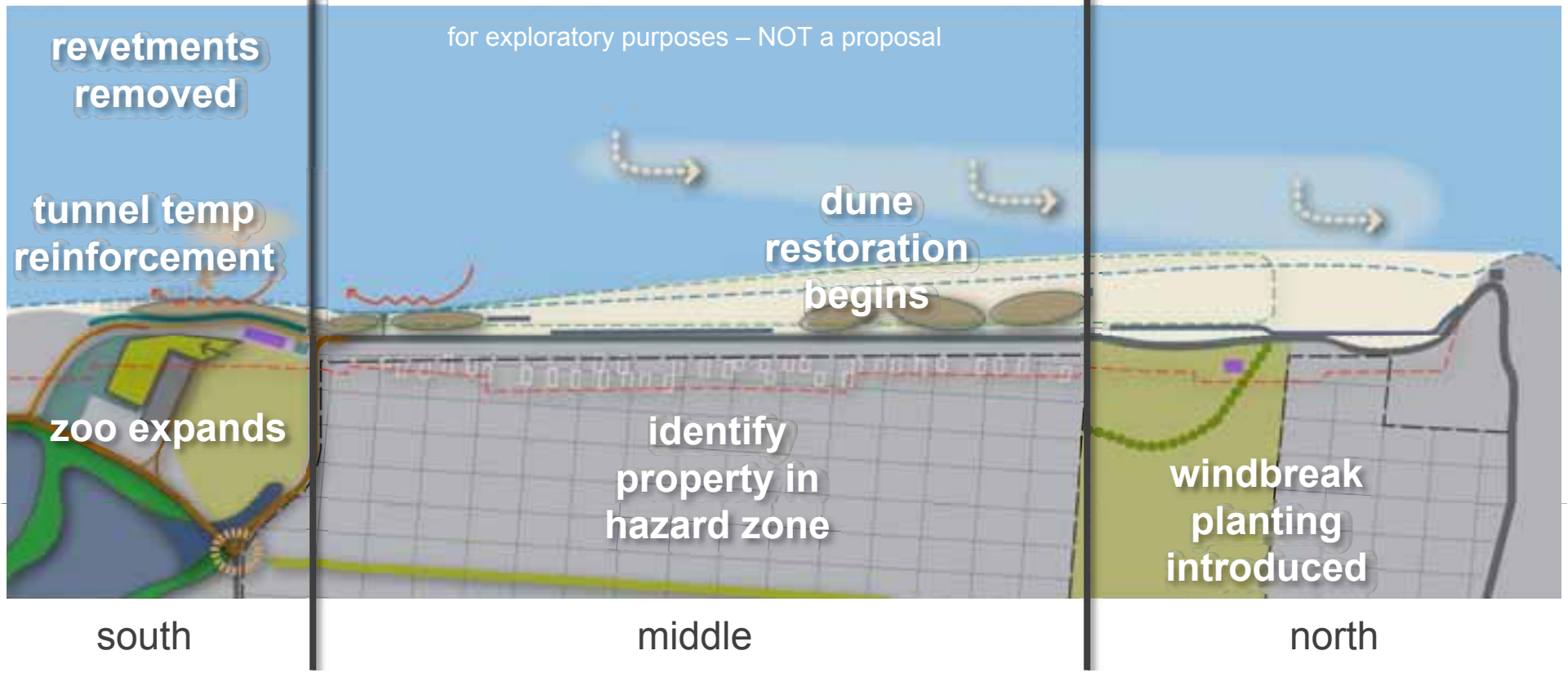
## how?

**maximize habitat restoration and comprehensive managed retreat**



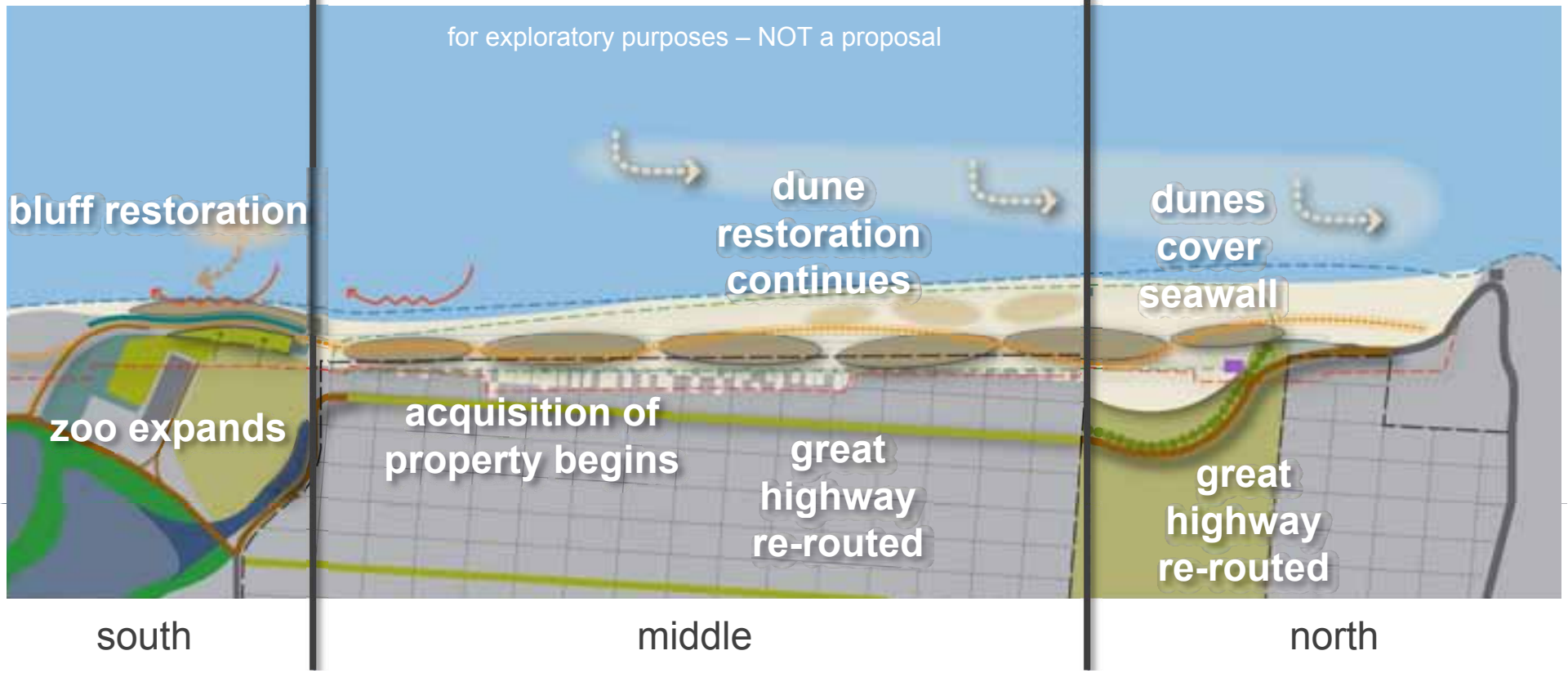

**0 to +5 years** [2015]

# A1 maximum habitat



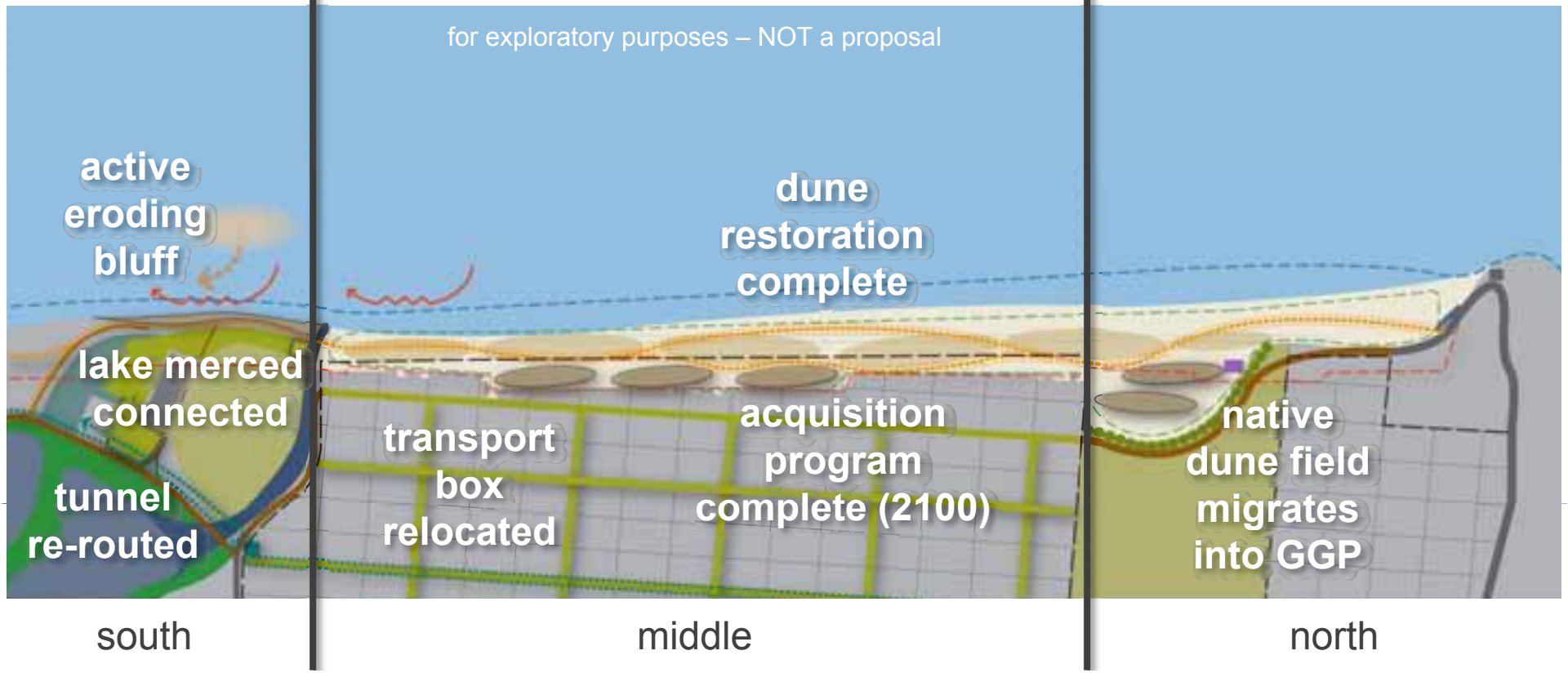

**+5 to +20 years** [2030 = SLR +7”]

# A2 maximum habitat




**+20 to +40 years** [2050 = SLR +14”]

# A3 maximum habitat




**+40 to +90 years** [2100 = SLR +55”]

# A4 maximum habitat

# four “test scenarios”

**B**

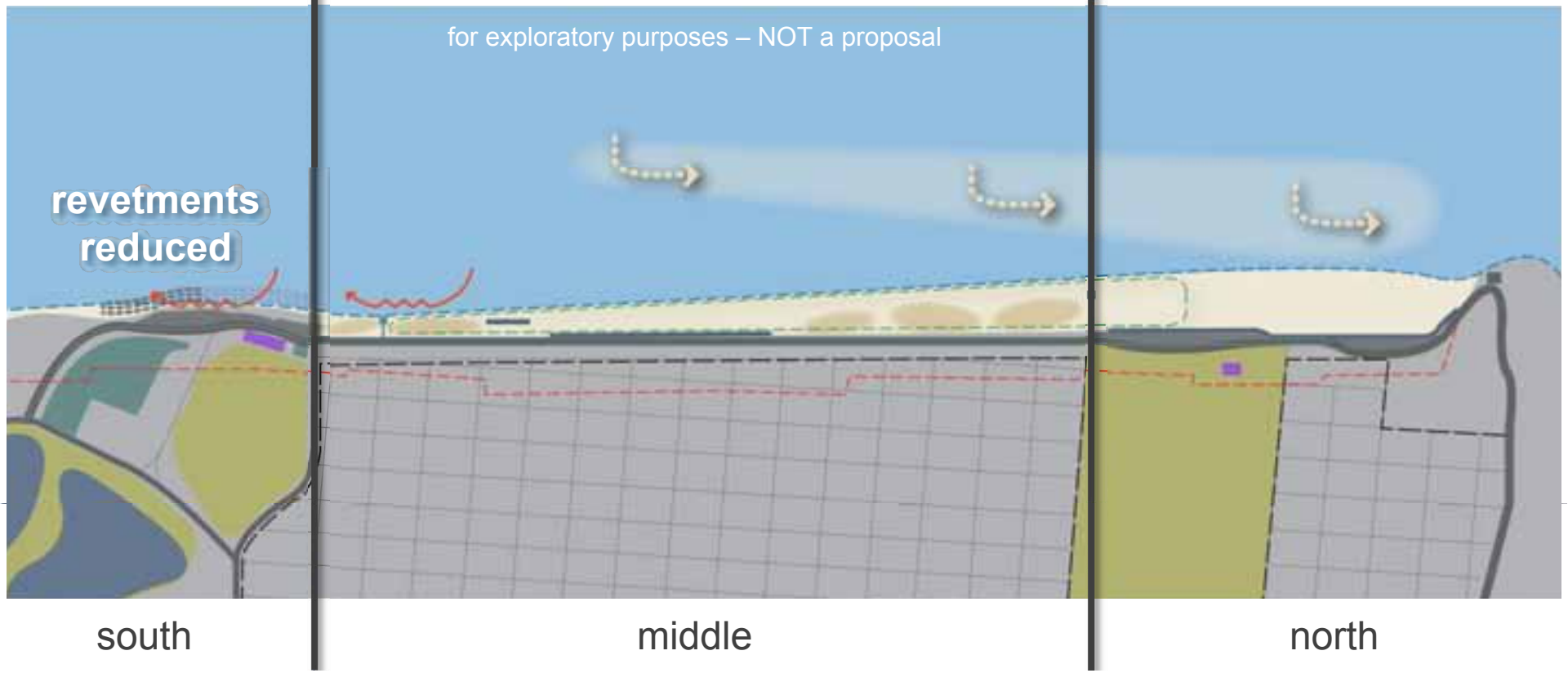
**maximum recreation**

## why?

- ✓ to offer a great experience for the broadest spectrum of visitors
- ✓ to celebrate and embrace the many facets of ocean beach

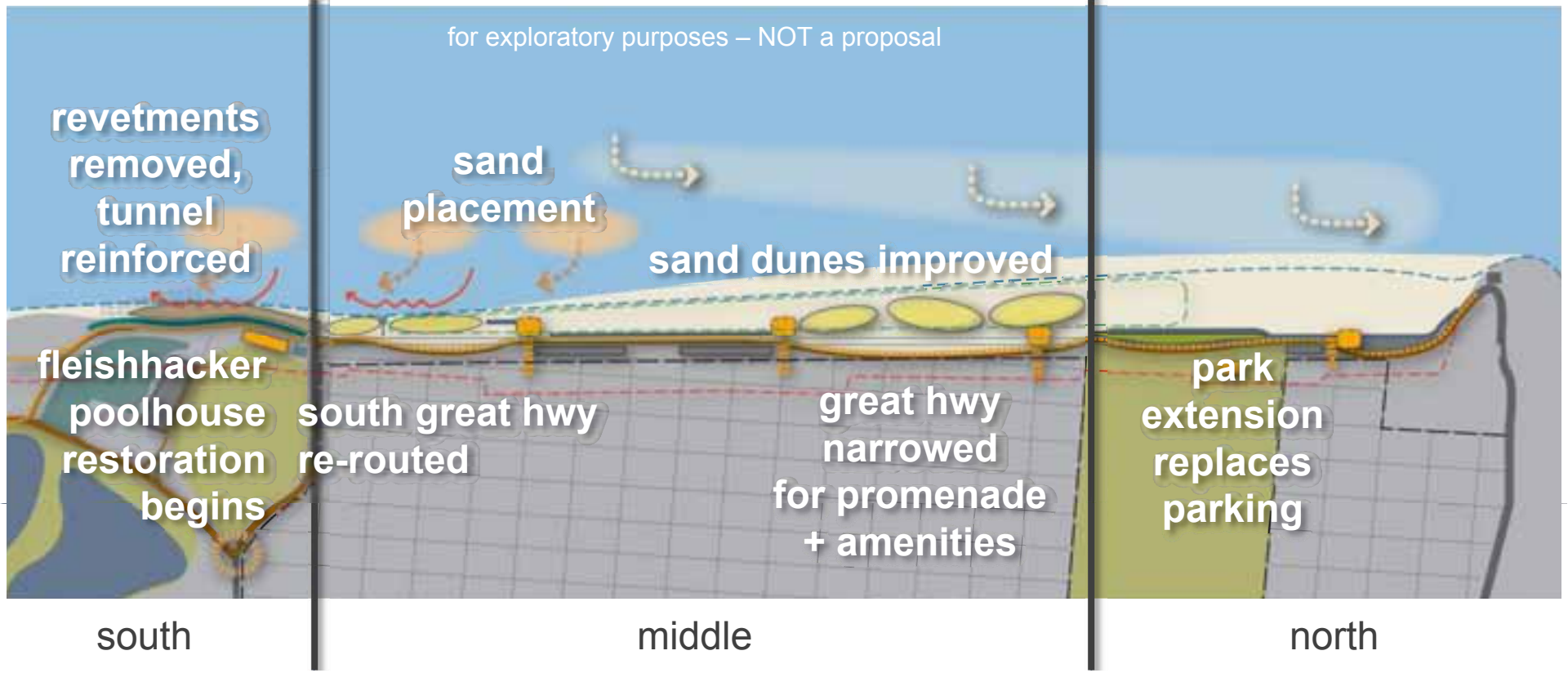
## how?

protect and enhance the natural character of ob while providing visitor amenities



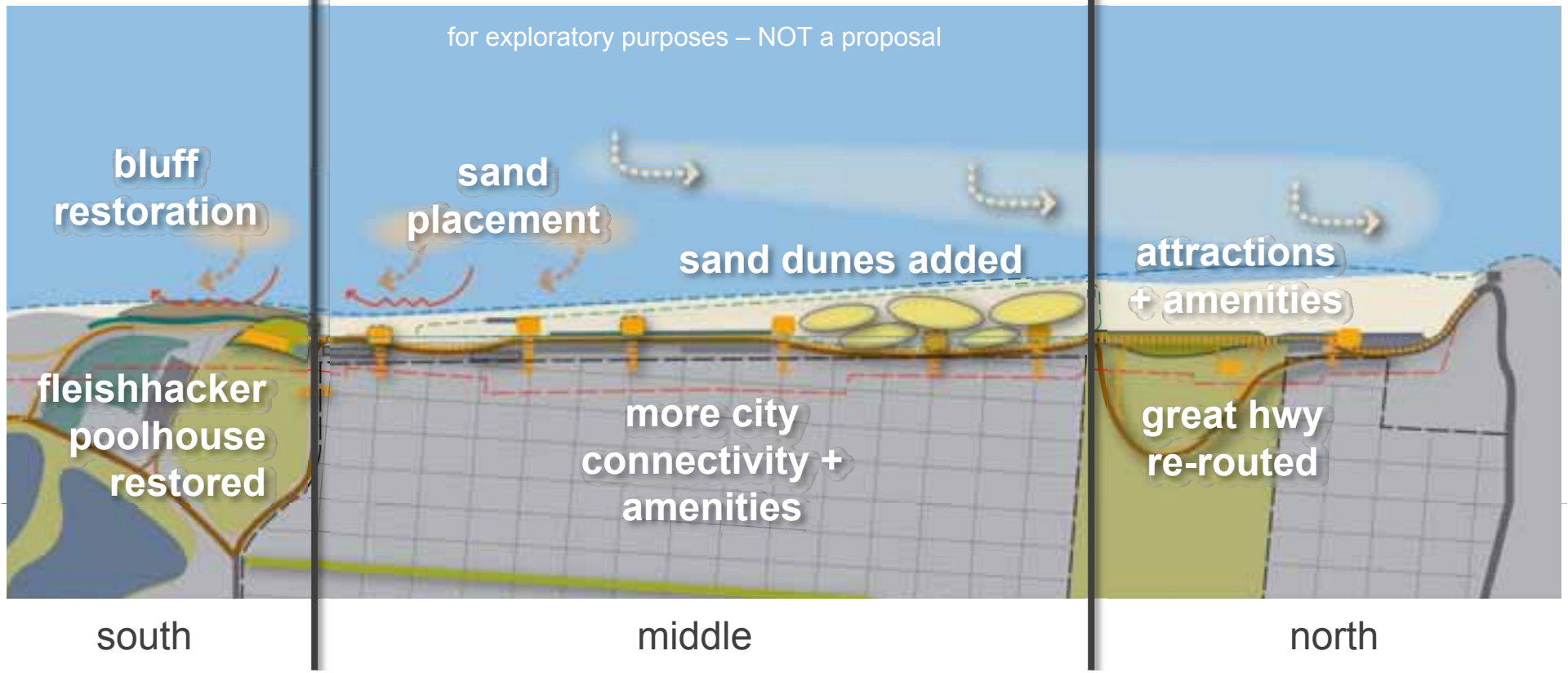

**0 to +5 years** [2015]

# B1 maximum recreation



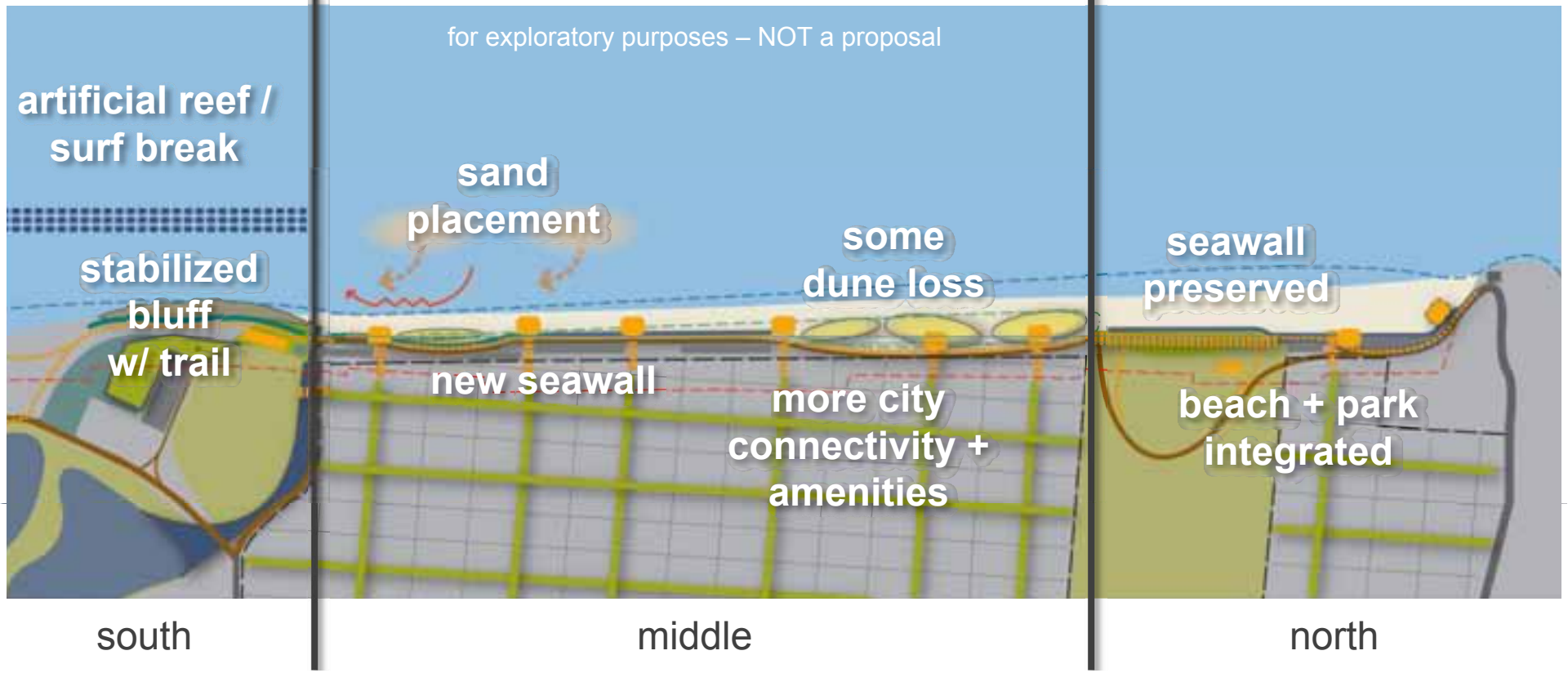

**+5 to +20 years** [2030 = SLR +7”]

# B2 maximum recreation




**+20 to +40 years** [2050 = SLR +14”]

# B3 maximum recreation




**+40 to +90 years** [2100 = SLR +55”]

# B4 maximum recreation

# four “test scenarios”

## c

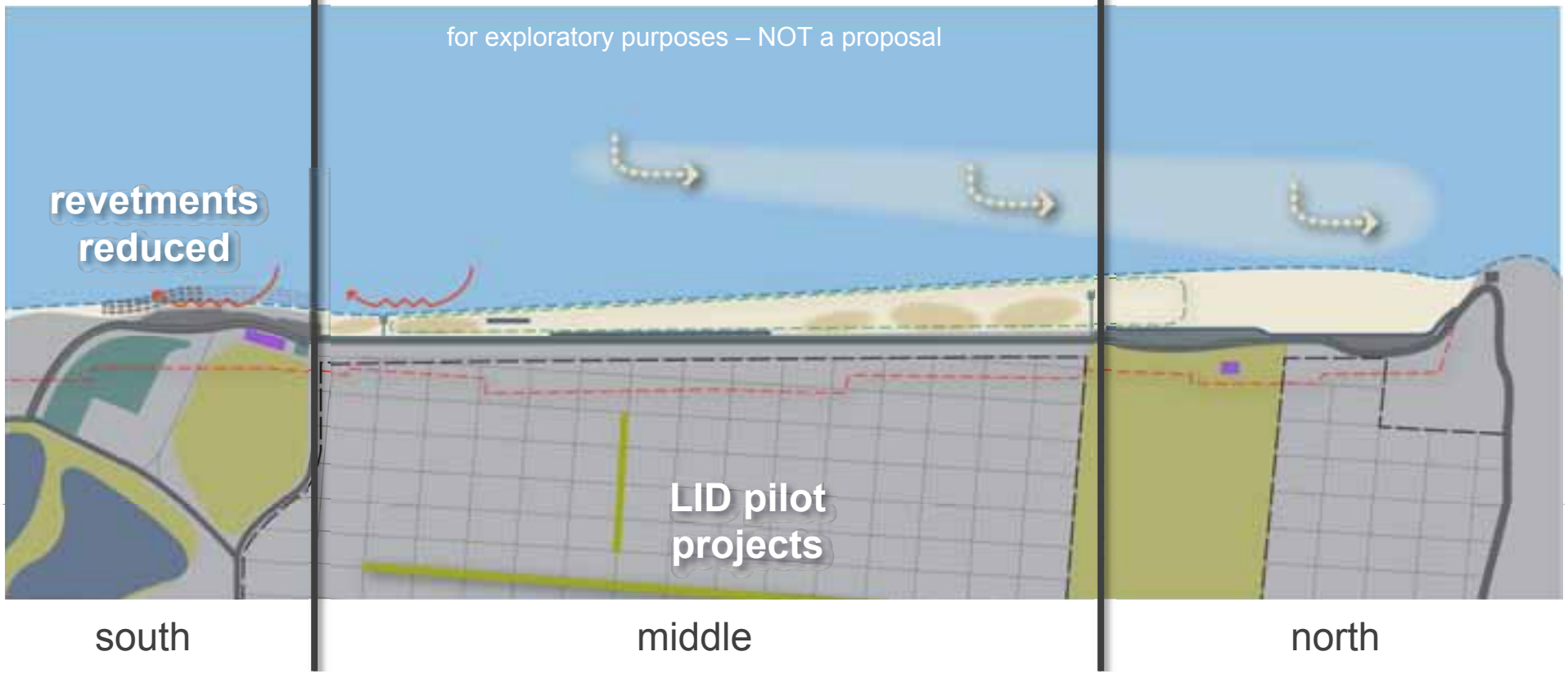
**maximum ‘green’ infrastructure**

## why?

- ✓ **to provide a more resilient, sustainable wastewater / stormwater system**
- ✓ **to support the health and function of the watershed**

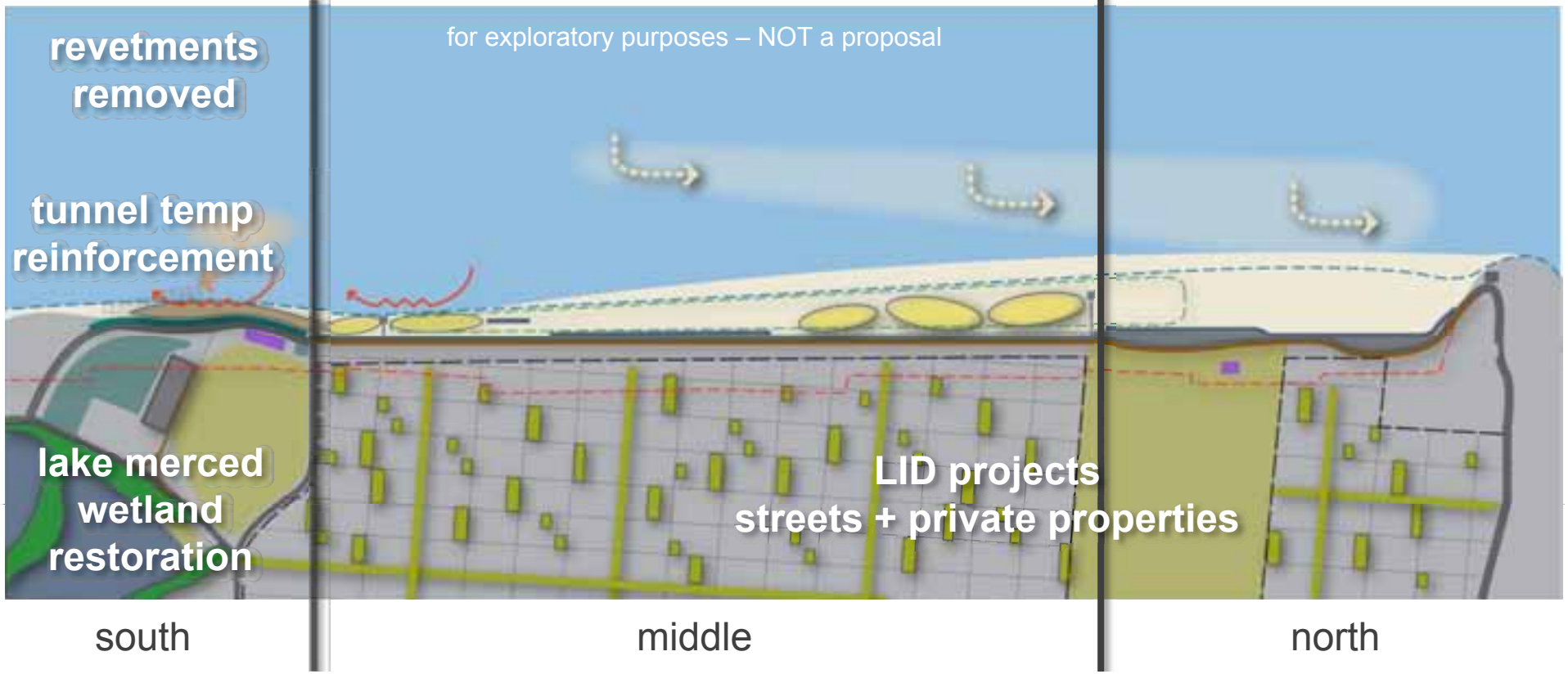
## how?

**implement green infrastructure to replace existing infrastructure**



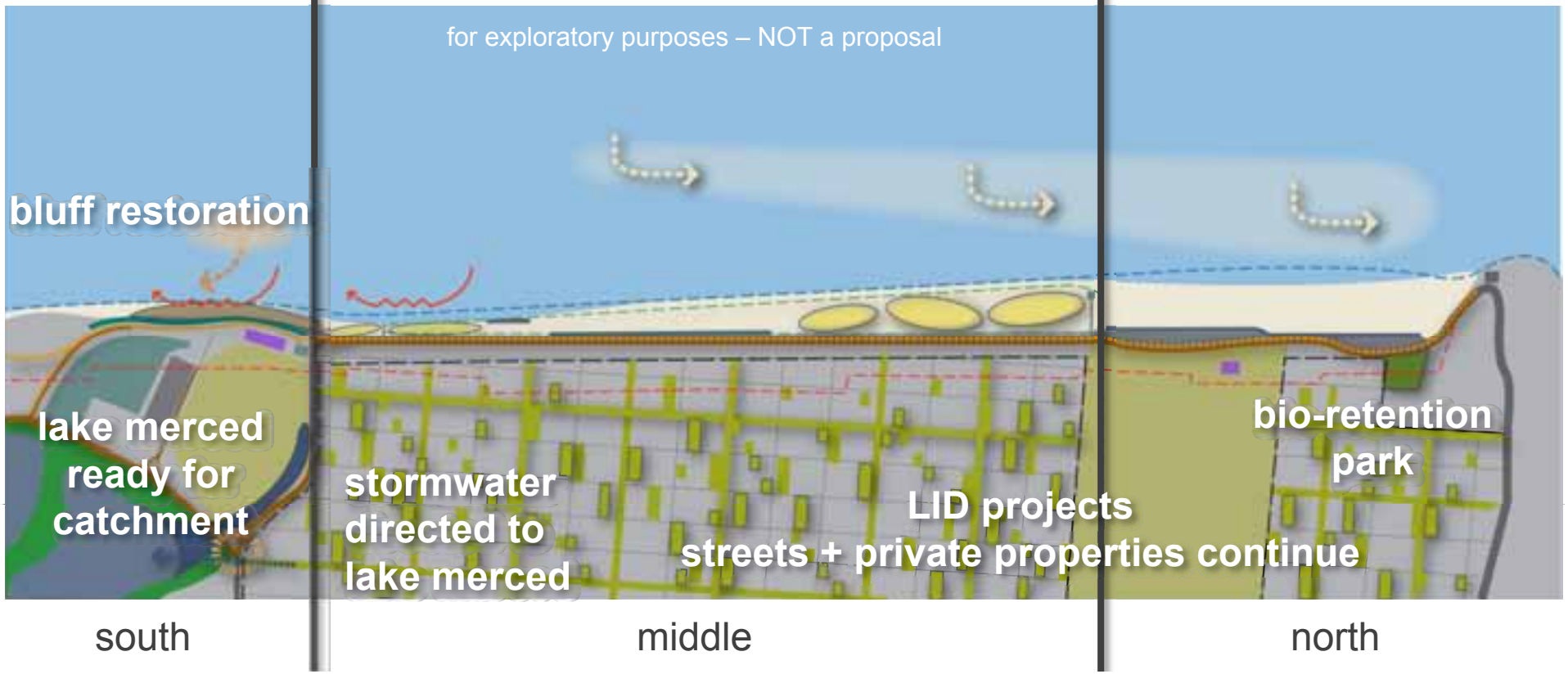

**0 to +5 years** [2015]

# C1 max ‘green’ infrastructure



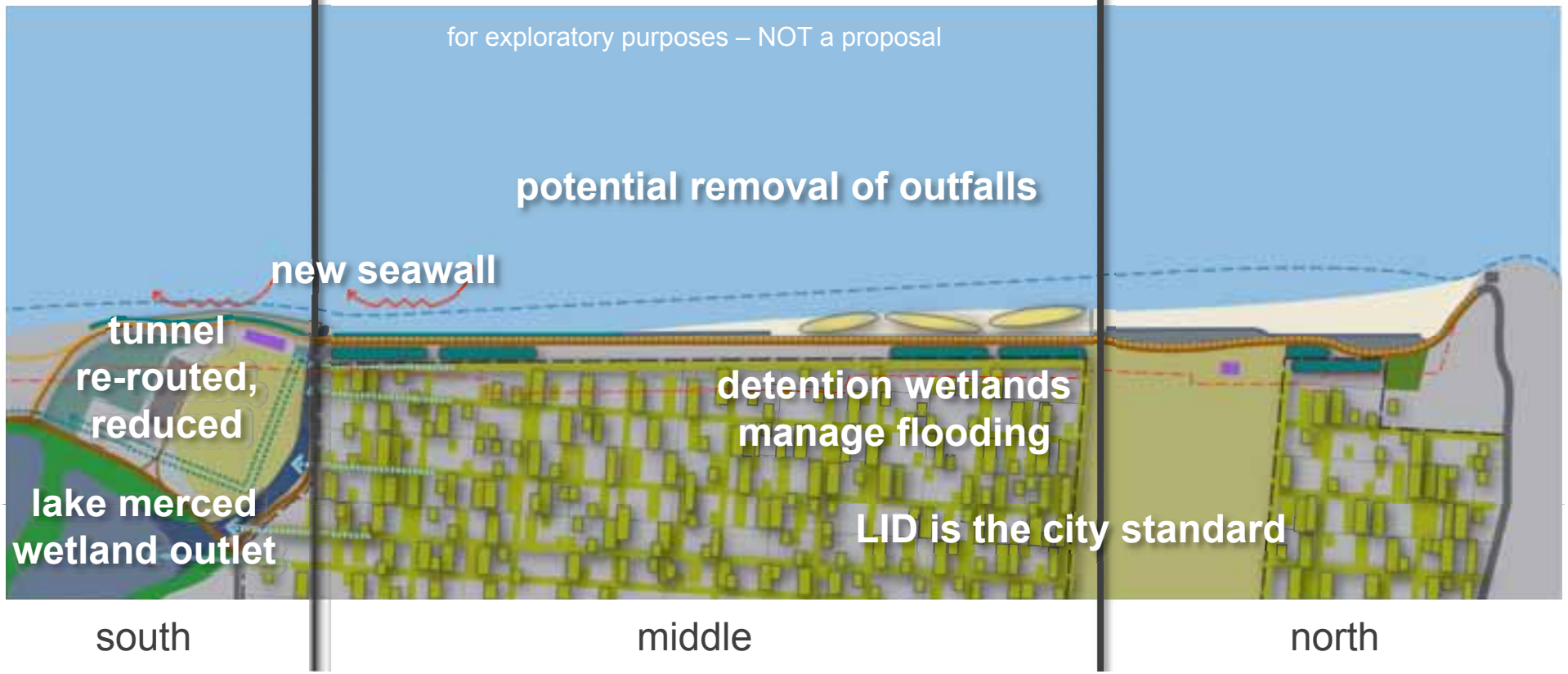

**+5 to +20 years** [2030 = SLR +7”]

# C2 max ‘green’ infrastructure




**+20 to +40 years** [2050 = SLR +14”]

# C3 max ‘green’ infrastructure




**+40 to +90 years** [2100 = SLR +55”]

# C4 max ‘green’ infrastructure

# four “test scenarios”

# D

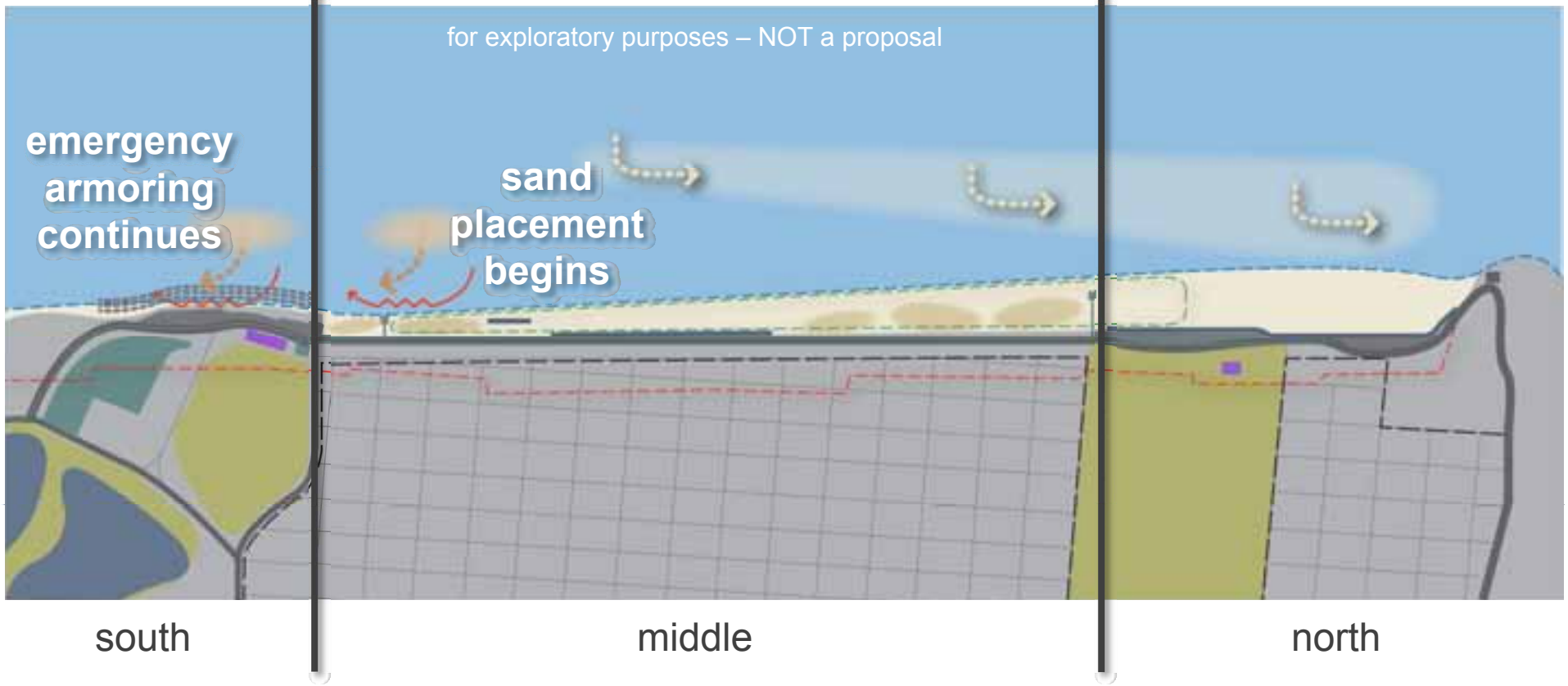
**maximum infrastructure**

## why?

- ✓ to protect rate-payer investment
- ✓ to maintain water quality protection and prevent flooding

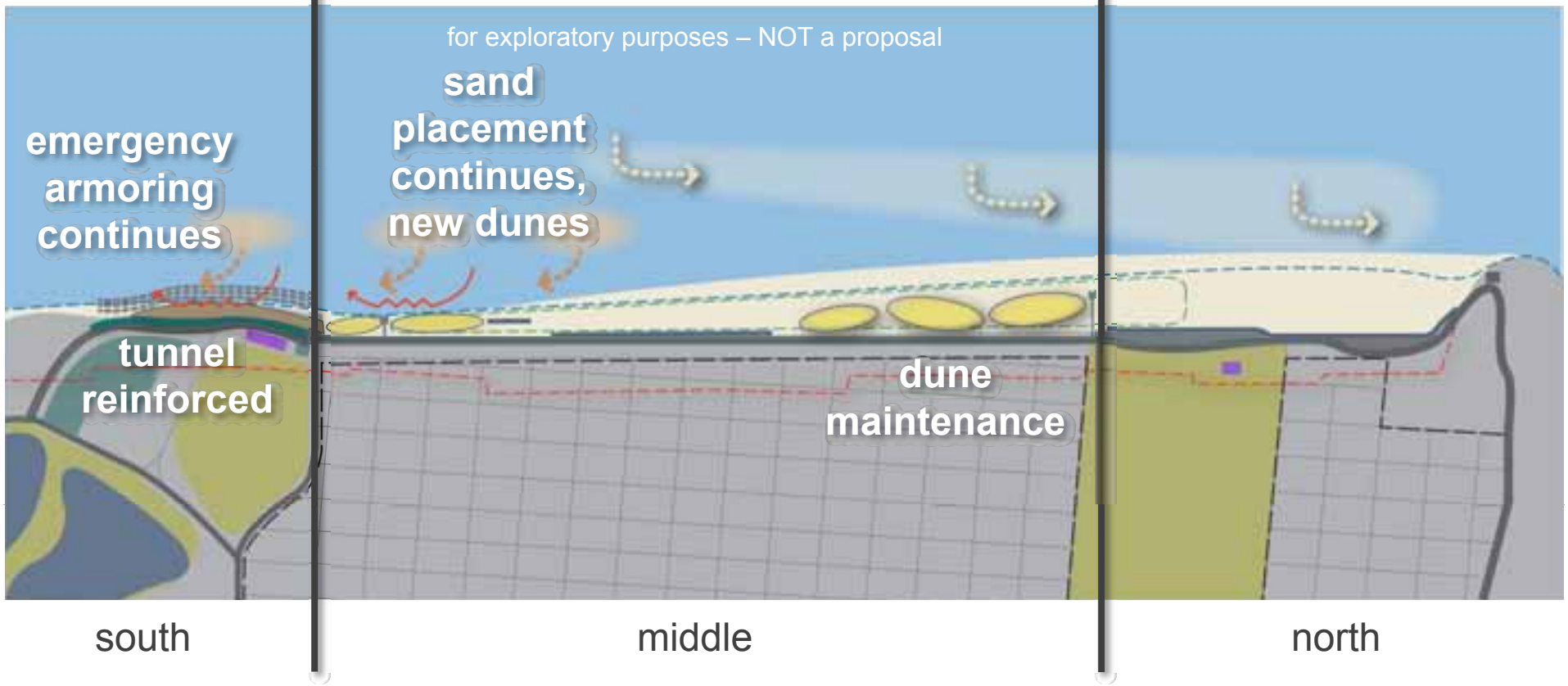
## how?

**protect existing infrastructure**



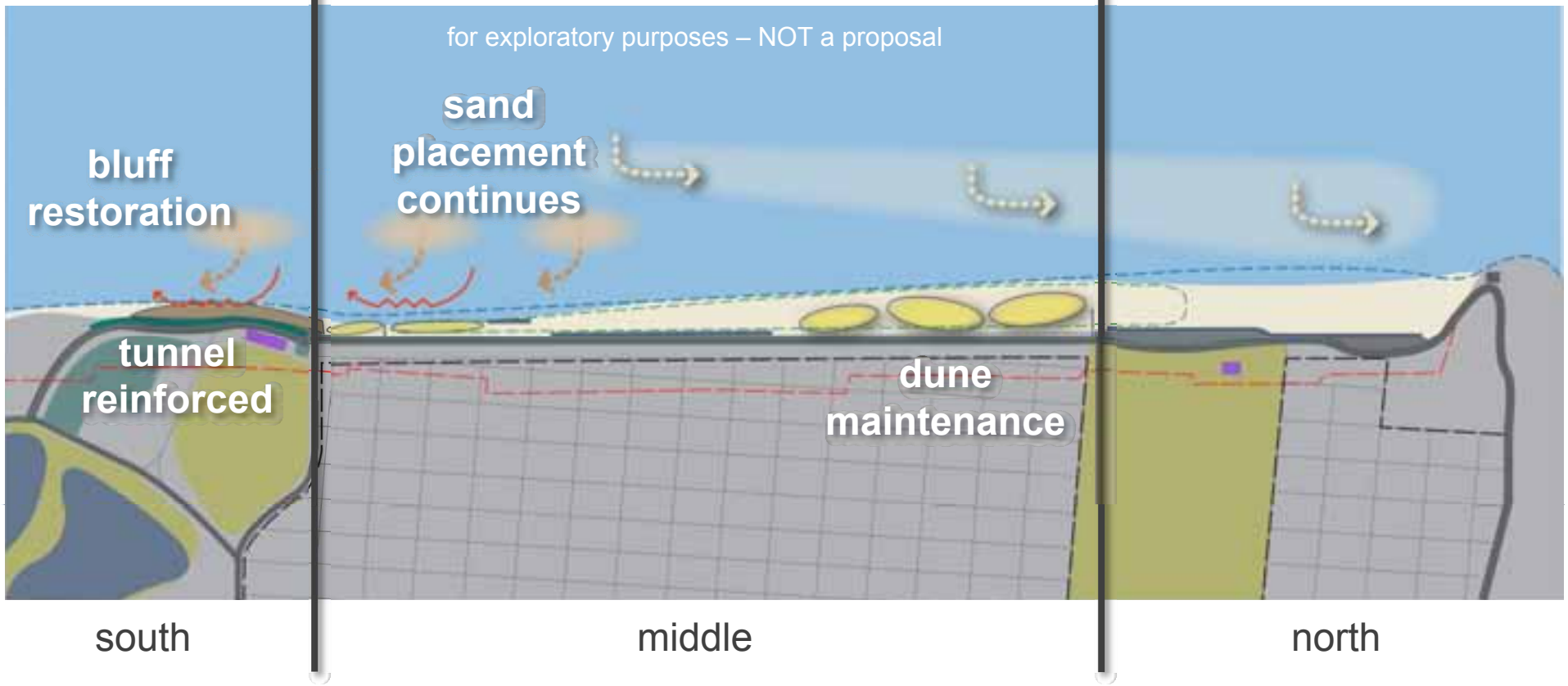

**0 to +5 years** [2015]

# D1 maximum infrastructure



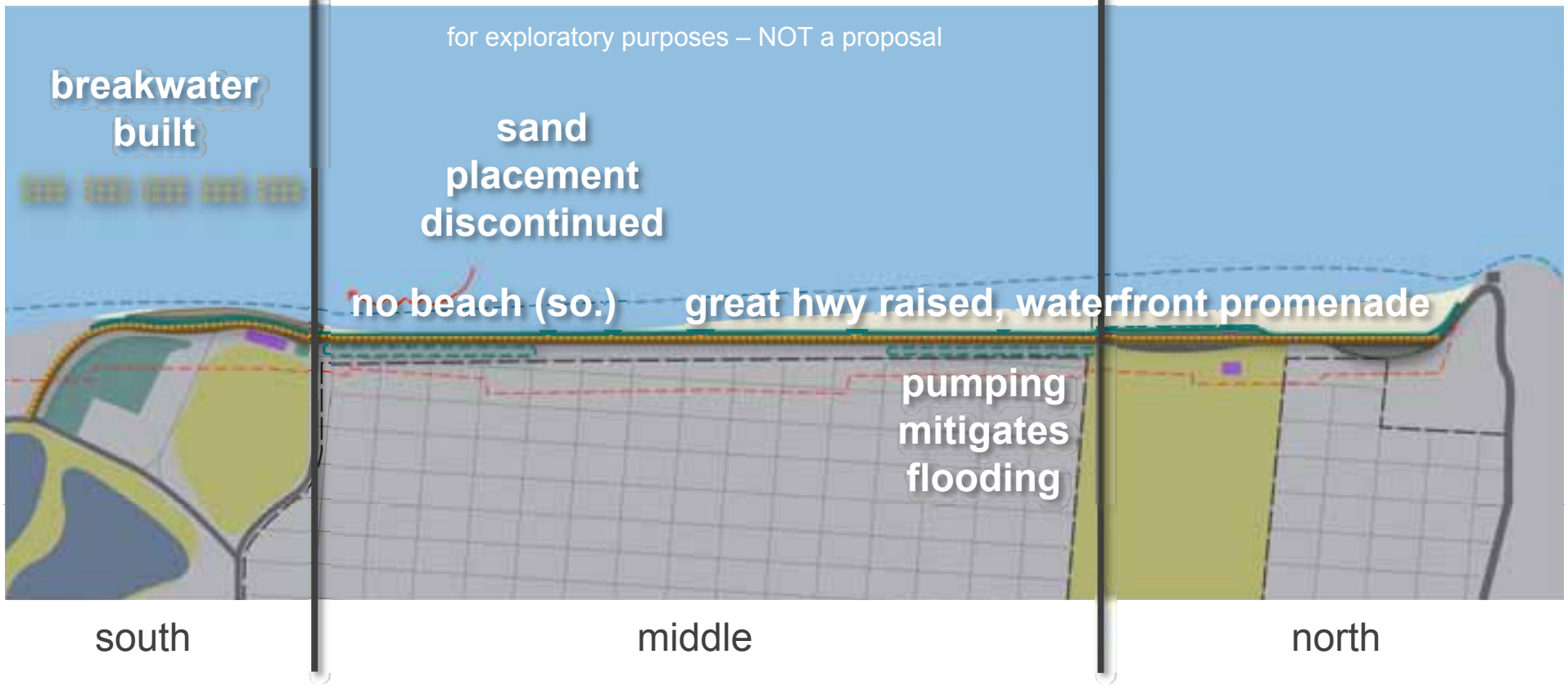

**+5 to +20 years** [2030 = SLR +7”]

# D2 maximum infrastructure




**+20 to +40 years** [2050 = SLR +14”]

# D3 maximum infrastructure




**+40 to +90 years** [2100 = SLR +55”]

# D4 maximum infrastructure


activity
…your input

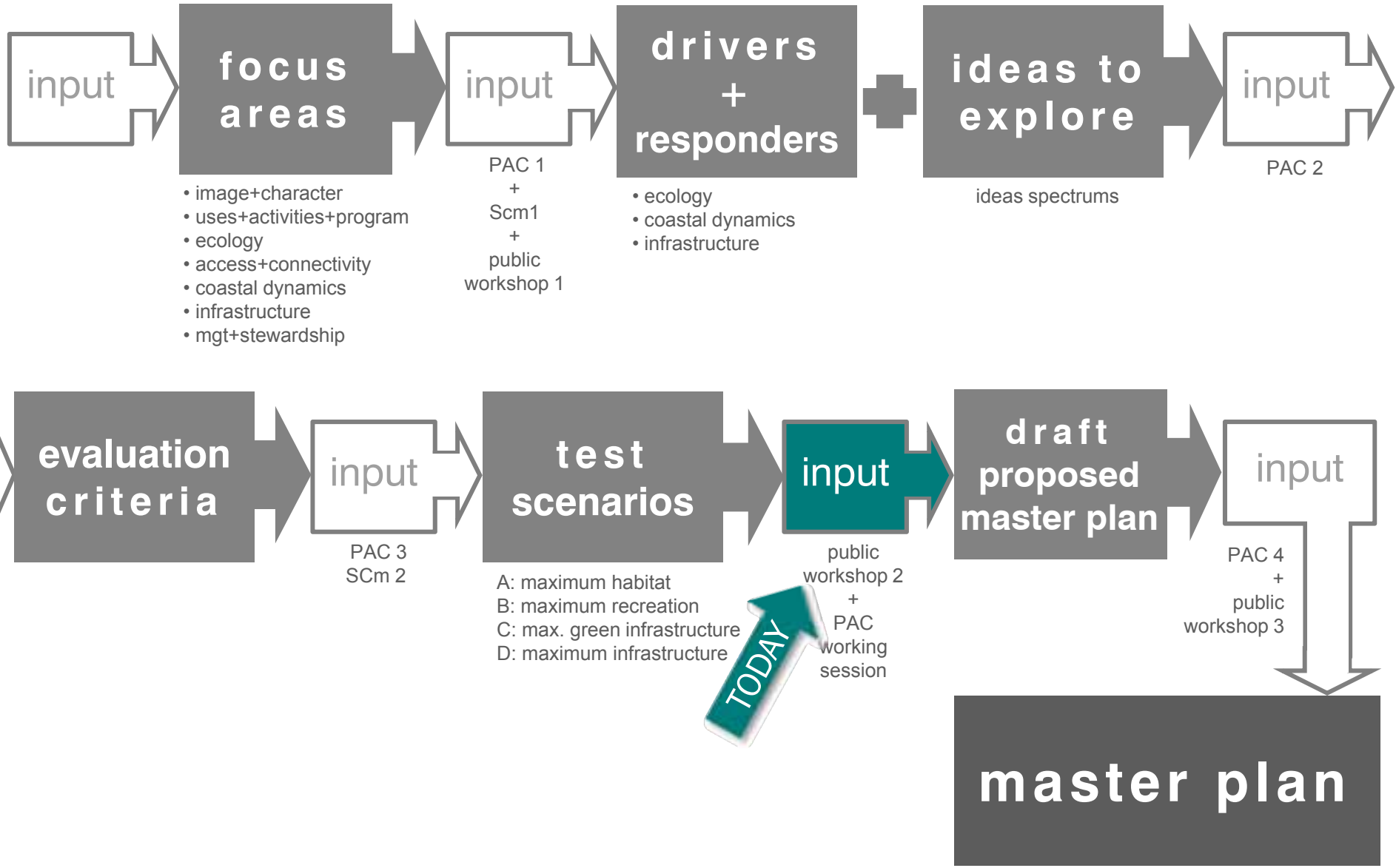
# activity

- ✓ **first, find your table with the letter on your nametag**
- ✓ **goal : discuss the opportunities at ob by creating your own hybrid/composite "test scenario"**
- ✓ **task 1 : work together to create a "test scenario":**
  - ✓ "flip" between the 3 different reaches of all 4 scenarios to create your own
  - ✓ use additional puzzle pieces to help complete the group scenario
- ✓ **task 2 : report back:**
  - ✓ the (5) key elements of your proposed "test scenario"


…report back


wrap-up

# OB master plan process + next steps



next public meeting: october, 2011

**questions / comments / suggestions?**

**email oceanbeach@spur.org**