# REALIGN: GROUP 1 (Katie)



* **STRATEGIES or POLICIES:** What can communities do to **REALIGN** away from hazards? (e.g. zoning restrictions)
* **METRICS:** How will communities measure the success of these strategies/policies? (e.g. households out of harm’s way)
* **HOW TO PAY FOR THESE POLICES/STRATEGIES:** Who and how will policies/strategies be funded? (e.g. raise taxes, grants)
* **WHO NEEDS TO BE INVOLVED:** Who in the community needs to be involved in the development of these strategies/policies? (e.g. decision-makers, specific community

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| Strategies or Policies | Metrics | How to Pay? | Who needs involved? |
| Construction and/or contractor incentives out of hazard zone (Itchung) | Rate comparison of incentivized communities v non-incentivized. Housing availability and affordability. # of incentives per community. | Utilize vacant properties to save on costs. and? | Coastal Caucus, county commissioners, city planners, economic organization (YBEF) |
|  Incentives for buyback programs. (Maya) |   |   | Coastal caucus, county commissioners, city planners, economic organizations, Local banks, community lenders, town halls, property owners. |
|  Reevaluate value of properties, restore function of property. (coastal land trust model) (Tom) |  How much private property at risk of losing value can turn into public property. |  Insurance payoffs, subsidy programs, advertise long term savings. | Coastal caucus, county commissioners, city planners, economic organizations. Environmental NGOs (TMC) who manage land trusts. |

# REALIGN: GROUP 2 (Dylan)



* **STRATEGIES or POLICIES:** What can communities do to **REALIGN** away from hazards? (e.g. zoning restrictions)
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| Strategies or Policies | Metrics | How to Pay? | Who needs involved? |
| -Limiting new building in these areas as opposed to realigning-If something is built in inundation zone, ensure its seismically engineered. | -Number of zoning permits granted for buildings inside/outside of zone;-Number and type of zoning wavers- Number of buildings reinforced vs not | Lodging taxes; especially for infrastructure for touristsTaxes – state level | DLCD |
| If there was an event, rebuild outside inundation zone | -Number of zoning permits granted for buildings inside/outside of zone; | FEMA relief; Taxes – state level | DLCD |
| Hospitals, emergency responders; schools | How far/many are outside inundation zone | Frame taxes such that people inland can benefit from it | - USACE-Community education/out reach |
| sewage treatment plants – before event, not after | Town level – number of towns that have plant outside. | Taxes – state level | -USACEOregon watershed enhancement board – funded by lottery |
| Encourage communication between towns for constructing new critical facilities outside of inundation zone |  |  | Seagrant and other grants |

# PROTECT: GROUP 1 (Jenna)



* **STRATEGIES or POLICIES:** What can communities do to **PROTECT** themselves from hazards? (e.g. update building codes)
* **METRICS:** How will communities measure the success of these strategies/policies? (e.g. households out of harm’s way)
* **HOW TO PAY FOR THESE POLICES/STRATEGIES:** Who and how will policies/strategies be funded? (e.g. raise taxes, grants)
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| Strategies or Policies | Metrics | How to Pay? | Who needs involved? |
|  Armor with GI on property (keep water on property)--local municipalities have GI codes (e.g. x% of impervious surface). |  Volume of water leaving the property10% reduction of BMPs |  Cost share mechanism to help pay for GI |  LandownersLocal municipalitiesCounty needs to have reinforced county policies—regulatory implementation power. |
|  Habitat native restoration for native oysters; blocks erosion & wave action. Wire cages; Gaybon (oyster shells) |  Before and after (experimental design)Change in erosionRecruitment of native oysters (depends on habitat—works in the bay) |  Solicit funding from grants for restoration |  Permitting agencies (if more widely adapted) |
|  Terracing for shellfish gardens (TEK); making clam gardens in inter-tidal lands, good habitat for culturing calms |  RecruitmentPhysical structure--erosion |   |  TribesShellfish hatcheries—providing seeds (also could help with $$) |
|  Comprehensive tailing of critical infrastructure (operating elevation of those systems) |  Establish a baseline (subject to impact); how many facilities have you mitigated (pumpfields—waste/drink water); dispersed organizations |  Rate payersState or county resiliency grants |  Water districts; utilities |
|  Vertical evacuation structures in areas where evacuation is limited |  Multi-use structures (make it efficient—serves a large amount of people)Location—placement—serves a large amount of people |  Lodging tax to support construction costs over time | Local governments, ASCE, researchers |
| Living levy—horizontal levy that allows for different habitats, slows SLR | Amount of floodingMaintenance cost |  |  |

# PROTECT: GROUP 2 (Meredith)



* **STRATEGIES or POLICIES:** What can communities do to **PROTECT** themselves from hazards? (e.g. update building codes)
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* **HOW TO PAY FOR THESE POLICES/STRATEGIES:** Who and how will policies/strategies be funded? (e.g. raise taxes, grants)
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Balancing preparing for acute vs chronic hazards

Policies based on science rather than insurance/ legal battles. Take lessons learned from CA wildfires

Programs to purchase properties for retreat (state agencies buy and then rent back?)

Moving public infrastructure east of 101

Apply these strategies at state rather than county or city level? No one size fits all approach, hard to change goal18, county level adjustments may allow more flexibility

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| Strategies or Policies | Metrics | How to Pay? | Who needs involved? |
|  Allow natural deterioration – stop protecting  |   |   |   |
|  Allowing for more strategic (contiguous) approach armoring – ‘protective regions’ |   |   |   |
|  Identify regions of hotspot erosion/ deposition |   |   |   |
| Prioritize ensuring access to transportation network |   |   |   |
|  Encourage natural/dynamic protective structures |   |   |  |

# RESTORE: GROUP 1 (John)



* **STRATEGIES or POLICIES:** What can communities do to **RESTORE** natural conditions to mitigate hazard impacts? (e.g. restore dune vegetation)
* **METRICS:** How will communities measure the success of these strategies/policies? (e.g. households out of harm’s way)
* **HOW TO PAY FOR THESE POLICES/STRATEGIES:** Who and how will policies/strategies be funded? (e.g. raise taxes, grants)
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| Strategies or Policies | Metrics | How to Pay? | Who needs involved? |
| Land use incentive for private owners – conservation agreements, transferable development rights | Comparative measures between communities with/without programs – National programs may provide models | Tax reliefPayments via marketPublic/private partnerships | State involvement in guidance to local communities |
| State leadership to incentivize local governments |   |   |   |
| Strong state guidance on land use goals, natural hazards goal specifically, more teeth |   |   | Guidance document from Oregon |
|  Statewide policy not to vacate public land west of 101 (e.g. roads not built but platted) |   |   |   |
| Public education about hazards, risks; science education |  Change of perceptions about risk |   | Extension, other entities? Policymakers, active citizen groups;Jose Melendez (UO) public education |
| Beach appropriate assist in public education masks to  |  |  |  |
| Master Naturalist program focused on coastal restoration |  |  | e.g Surfrider, master gardners |

# RESTORE: GROUP 2 (Peter)



* **STRATEGIES or POLICIES:** What can communities do to **RESTORE** natural conditions to mitigate hazard impacts? (e.g. restore dune vegetation)
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| Strategies or Policies | Metrics | How to Pay? | Who needs involved? |
|  Better setbacks |  # of building impacted by tsunami |  Very expensive to nourish beaches |  Decision making community |
| Construct to FEMA elevation standards + elevations high enough to withstand tsunamis | # of building impacted by SLR |  taxes | Surfrider other groups that use Oregon’s beaches for many reasons. |
| Vertical evacuation structures.  | % of protected shoreline |  Volunteers for planting |   |
| Keep spatial data updated! New information on hazards continuously improved and updated. | Increase/decrease in tourism |  Community fees |   |
| Be open to changing current strategies. | # of volunteer participants involved in restoration |  Hotel taxGrants for implementation of restoration (pew charitable trust). |  |