

USACE & Boston Studu di Jeston di Risku di Tenpestadis Kosteru

Atualizason di Dorchester
17 di junhu di 2025



City of Boston
Climate Resilience

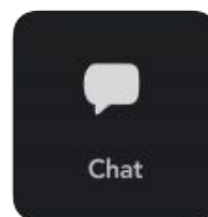
UZU DI ZOOM - GRAVASON DI RUNION

A pedidu di menbrus di komunidadadi, es iventu ta ser gravadu y ta ser publikadu na pájina web di prujetu pa kes ki ka kunsigi partisipa na iventu di Zoom na ora:

<https://www.boston.gov/departments/climate-resilience/climate-ready-boston-and-army-corps-partnership>

Si bu ka kre ser gravadu duranti runion, purfavor desliga bu mikrofonu y kamera.

Si bu mikrofonu y kamera sta desligadu, bu inda pode partisipa ta uza funson di testu na chat.



USACE & Boston Studu di Jeston di Risku di Tenpestadis Kosteru

Atualizason di Dorchester
17 di junhu di 2025



City of Boston
Climate Resilience

Metas

- *un introduson di ekipas di Sidadi y Governu Federal*
- *fundamentu di "Climate Ready Boston" na Dorchester*
- *relatóriu di passos y progresu di studu di USACE*
- *un oportunidadadi pa fazi perguntas*
- *modi bu pode da feedback y prósimus pasu*



CLIMATE READY BOSTON



Na 2016, Sidadi di Boston publika Raportu di *Boston Climate Ready*, ki inklui un avaliason di vulnerabilidadi di risku atual y projetu asosiadu ku kada un di kes trêş perigu klimátiku baxu, médiu y altu di emison di gás di estufa.

EXTREME TEMPERATURES



**HEAT WAVES &
DROUGHTS**

EXTREME PRECIPITATION



**STORMWATER
FLOODING**

SEA LEVEL RISE



**COASTAL & RIVERINE
FLOODING**

COASTAL STORMS



VIZION DI PORTU REZILIENTI



DORCHESTER

SOUTH BOSTON

DOWNTOWN

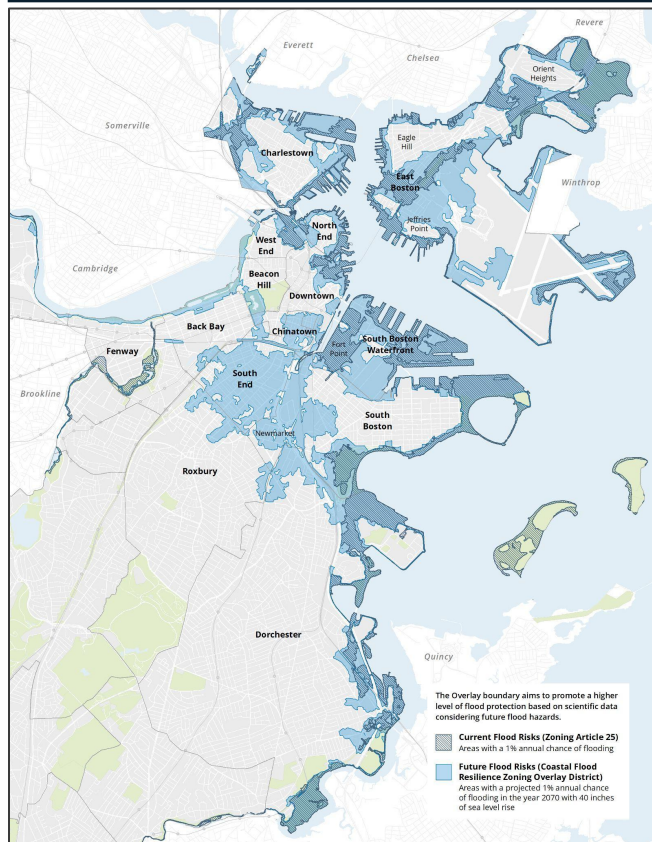
EAST BOSTON



RESILIENT BOSTON HARBOR

-  = FLOOD ADAPTED BUILDINGS
-  = ELEVATED LANDSCAPES
-  = CONNECTIONS AND ACCESS

PLANUS DI REZILIÉNSIA KOSTERU NA ZONA



- Tenpestadi ku probabilitadi anual di 1% ku 9 polegadas di subida di nivel di mar (dékada di 2030)
- Tenpestadi ku probabilitadi anual di 1% ku 40 polegadas di subida di nivel di mar (dékada di 2070)

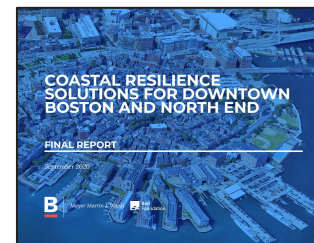
Entri 2017–2022, Sidadi kompleta planus di reziliénsia kosteru na zona pa tudu 47 milhas Kosteru di Boston.



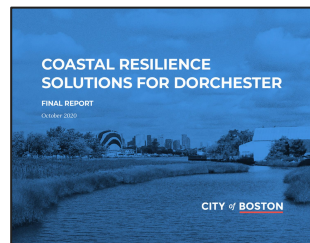
Fazi 1 na Este di Boston & Dorchester (2017)



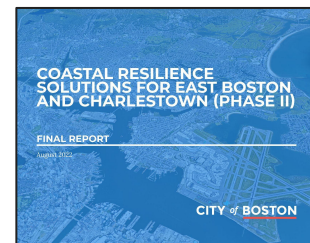
Sul di Boston (2018)



Stremidadi Norti y Sentru (2020)

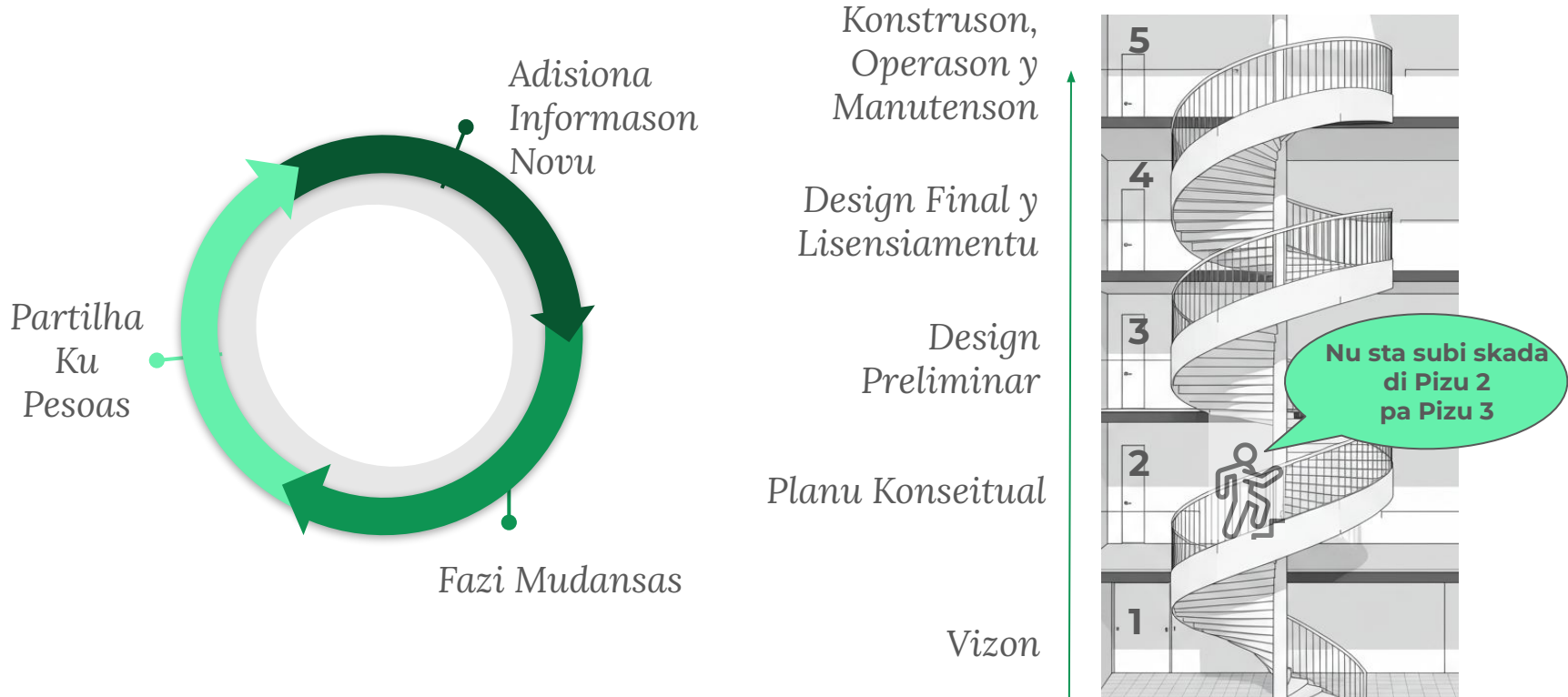


Dorchester (2020)



Fazi 1 na Este di Boston y Dorchester Fazi 2 (2022)

PRUSESU PODI PARSE SIMA UN SKADA NA SPIRAL...



INUNDASON KOSTERU NA BOSTON NA 2018 Y 2022



Inundason duranti Tenpestadi di Invernu Riley na Stremidadi Norti di Boston
(Fonti: Matt Conti, Invernu 2018)



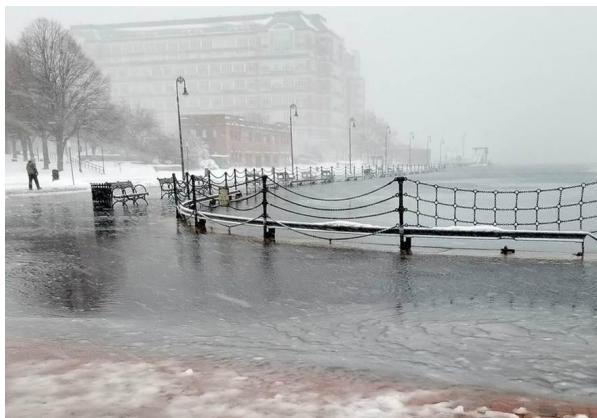
Inundason na Mary Ellen Welch Greenway na Leste di Boston
(Fonti: Lisa A. DiFrisco, Invernu 2018)



Inundason na fundu di Evelyn Moakley Bridge na Fort Point Channel, Sul di Boston
(Fonti: Alison Brizius, Dezembru 2022)



Omi ta anda di kayak ta parse na Lewis Mall na Leste di Boston
(Fonti: Steve Holt, Invernu 2018)



Inundason na Harborwalk na Charlestown Navy Yard
(Fonti: Gerry Angoff, Invernu 2018)



Inundason na Harborwalk na Sentru di Boston
(Fonti: Alison Brizius, Dezembru 2022)

IMPLEMENTASON DI REZILIÉNSIA KOSTERU: TRÊS STRATÉJIAS SIMULTÂNIU

TENPESTADIS DI GOSI

Objetivu Prinsipal:
Reforsa nos resposta pa
inundasons di gosi

Modi?

Esplika moradoris sobri preparason
pa situasons di imerjénsia, reforsa
protokolus pa preparason y resposta
di tempu stremu, y operasionaliza
barreiras móvel

Prinsipais Ajéncias di Sidadi:

Gabinete di Jeston di Emerjénsia
Gabinete di Reziliénsia Klimátika

TENPESTADIS DI ES DÉKADA

Objetivu Prinsipal:
Trata kaminhus di
inundason previstu pa
2030

Modi?

Avansa prujetus di prioridadi di
kurtu prazu identifikadu na
planus di reziliénsia kusteru, di
designonseitua pa konstruson

Prinsipais Ajéncias di Sidadi:

Gabinete di Reziliénsia Klimátika
Departamentu di Planeamentu
Departamentu di Parkis y
Rekreason

DIPÔS DI 2030

Objetivu Prinsipal:
Transforma nos 47
milhas Kosteru

Modi?

Através di un parseria continuadu
ku U.S. Army Corps of Engineers,
avansa prujetus di prioridadi di
médiu y longu prazu di design
konseitua pa konstruson

Prinsipais Ajéncias di Sidadi:

Gabinete di Reziliénsia Klimátika,
Departamentu di Planeamentu,
Komisom di Aguas y Saneamentu
di Boston, y mutu más!

IMPLEMENTASON DI REZILIÉNSIA KOSTERU: TRÊS STRATÉJIAS SIMULTÂNIU

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Reforsa nos resposta pa inundasons di gosi

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Esplika moradoris sobri preparason pa situasons di imerjénsia, reforsa protokolus pa preparason y resposta di tempu stremu, y operasionaliza barreiras móvel

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Gabinete di Reziliénsia Klimátika

TENPESTADIS DI ES DÉKADA

Objetivu Prinsipal:
Trata kaminhus di inundason previstu pa 2030

Modi?

Avansa prujetus di prioridadi di kurtu prazu identifikadu na planus di reziliénsia kusteru, di designonseitua pa konstruson

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Departamentu di Parkis y Rekreason

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Transforma nos 47 milhas Kosteru

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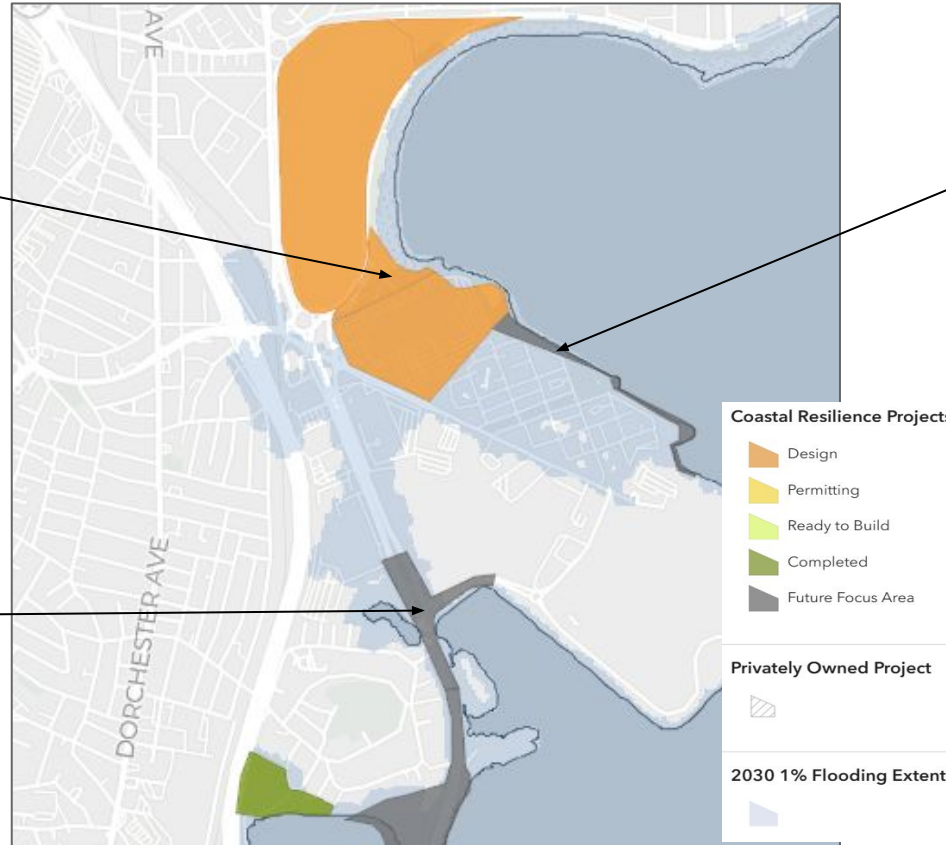
IMPLEMENTASON DI REZILIÉNSIA KOSTERU - DORCHESTER



**Moakley Park &
Moakley Connectors**
Design na andamentu



Morrissey Boulevard
*MassDOT
Ta Spera Prósimum Pasu*



**HARBOR POINT
HARBORWALK**
Zona di Foku pa Futuru

Mapa ta mostra estendimentu di inundason produzidu di Modelu di Riskus di Inundason Kosteru di Massachusetts (MC-FRM), ki é Modelu di Programa di Inundason adotadu pa Commonwealth di Massachusetts. Inundason mostradu ta konta 1% anual di xanse di tenpestadi ku projeson di subida di maré na 2030.

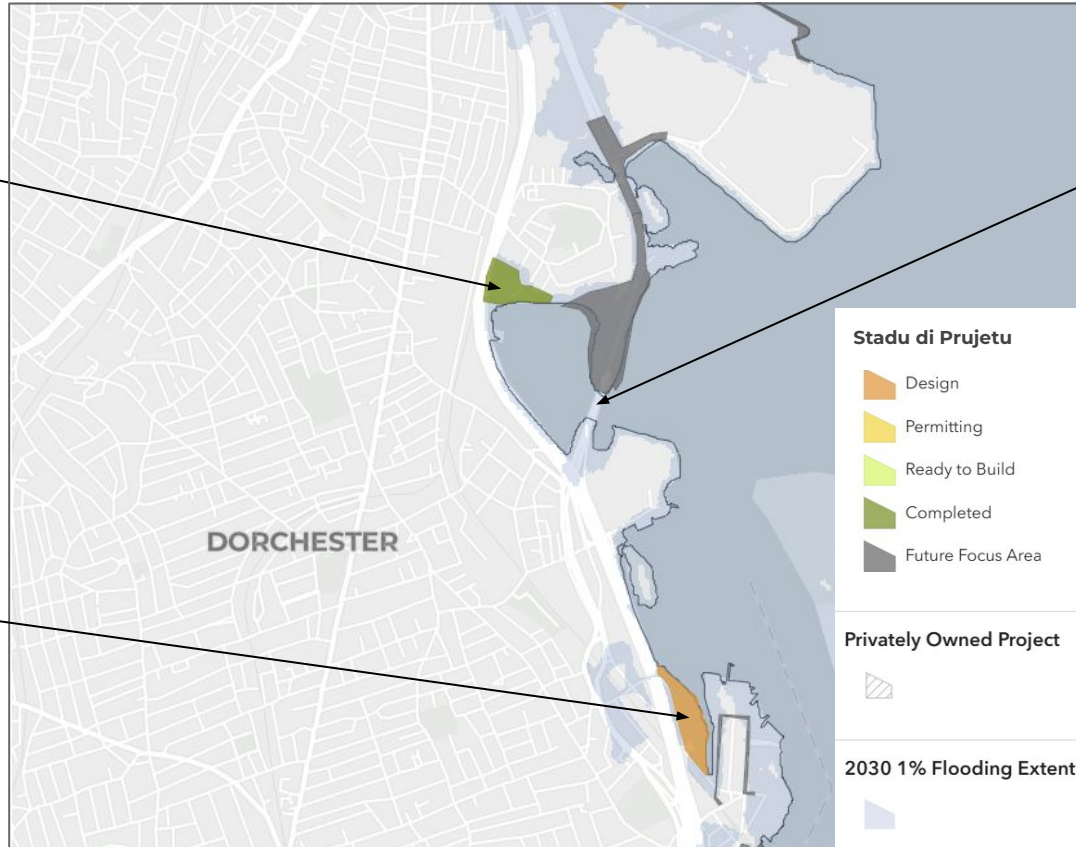
IMPLEMENTASON DI REZILIÉNSIA KOSTERU - DORCHESTER



McConnell Park
Konstruidu na 2022



Tenean Beach
Ta Spera Prósímus Pasu



Beades Bridge
*Prujetu di MassDOT
na Fazi di Design*

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IMPLEMENTASON DI REZILIÉNSIA KOSTERU: TRÊS STRATÉJIAS SIMULTÂNIU

TENPESTADIS DI GOSI

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Reforsa nos resposta pa
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Komisom di Aguas y Saneamentu d
Boston, y mutu más!

PAMODI GOSI Y PAMODI USACE?

- USACE ten un akuzason espesifiku pa pruposta soluson di resiliénsia Kosteru ki **é efetivu na mitigason di risku pa Interés Federal**;
 - Nu ten interesi kumun **pa proteji kaza, infraestruturá krítiku y koridoris di evakuason**;
- USACE **ta sigi un prosesu espesifiku** na diziginason, avaliason y seleison di prugetu.
 - Es pode da **ti 65% di kustu** pa konstrui kes struturas.



UNDI NU STA NA PRUSESU DI USACE?



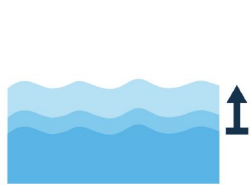
Prusesu di CSRМ:

Análize y Jeston di Risku di Tenpestadi Kosteru 101



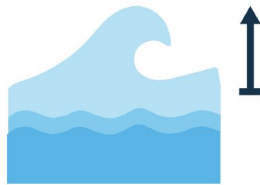
MODI USACE TA DEFINI RISKU DI TENPESTADI KOSTERU?

PERIGUS KOSTERU:



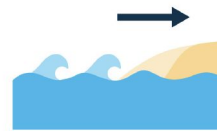
ALTERASON DI MARÉ

Aumentu permanenti di
nível di mar na relason ku
tera



ONDA DI TEMPESTADI

Subida temporáriu di nivel di
mar durante un tenpestadi



ASON DI ONDAS Y EROZON

Reduson graduál Kosteru komu
ondas ta leba sedimentu

FITXA KAMINHUS DI INUNDASON DI LONGU PRAZU:

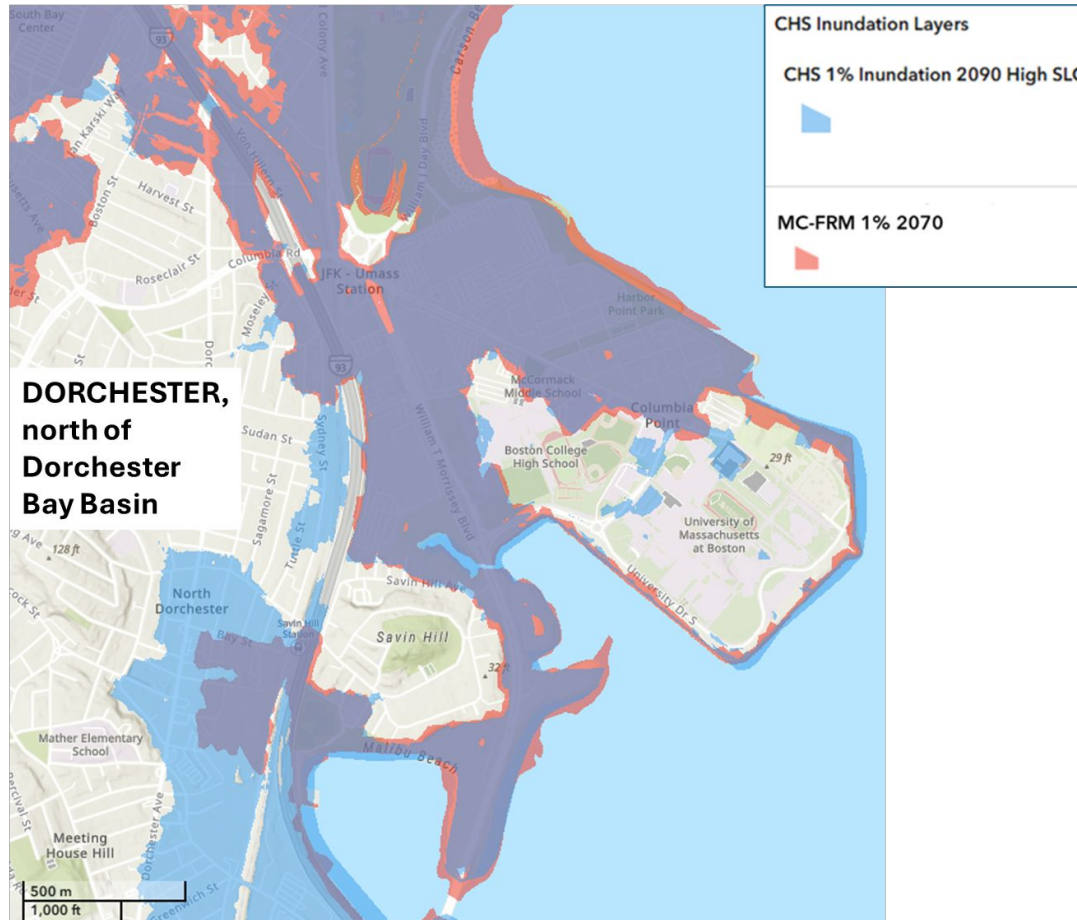


KAMINHU DI INUNDASON

Ta afeta árias internu kantu água ta entra pa
un zona baxu na beira-mar



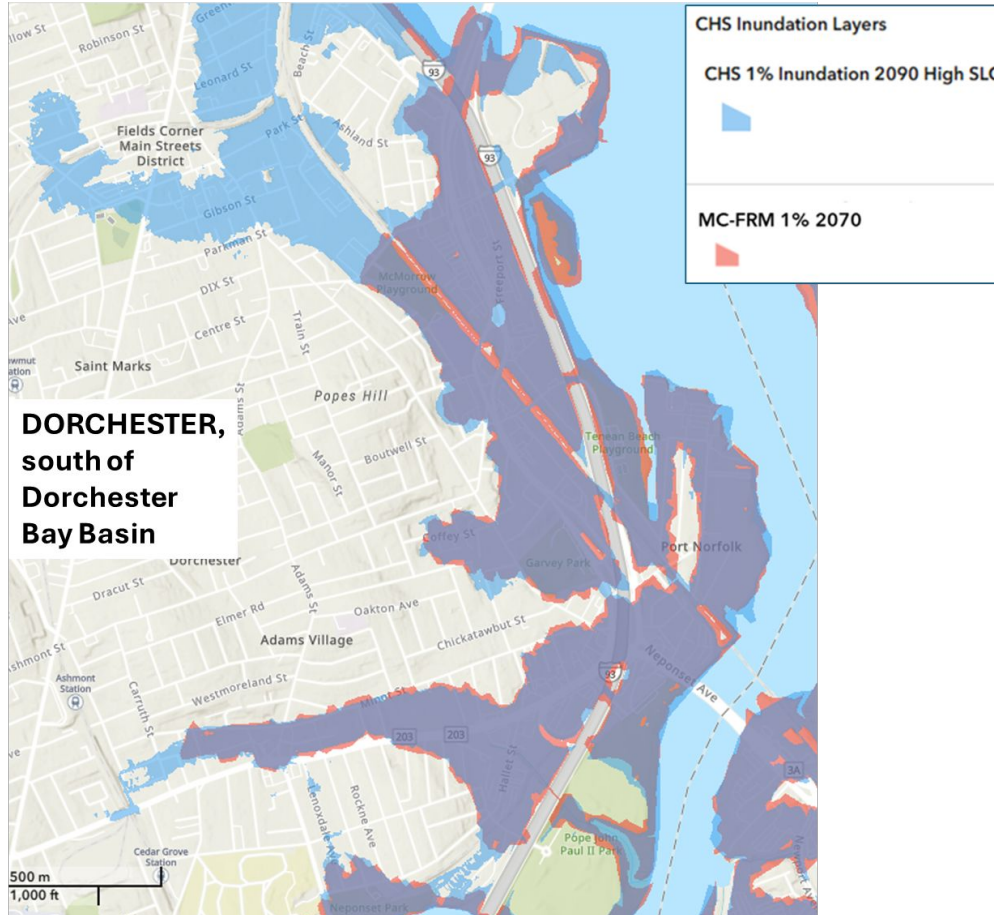
JESTON DI RISKU DI TENPESTADI KOSTERU: MODI KI KELI É DIFERENTI DI CLIMATE READY BOSTON?



US Army Corps
of Engineers



JESTON DI RISKU DI TENPESTADI KOSTERU: MODI KI KELI É DIFERENTI DI CLIMATE READY BOSTON?



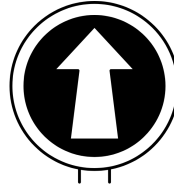
US Army Corps
of Engineers



MODI USACE TA DEFINI “INTERESI FEDERAL”?



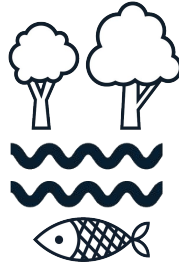
Proteson di
Moradia



Proteson di Kaminhus
di Evakuason



Proteson di
Infraestrutúra Kritisiku



Proteson di Rekursus
Naturál



Proteson di Povú



Proteson di Transporti
Kritisiku



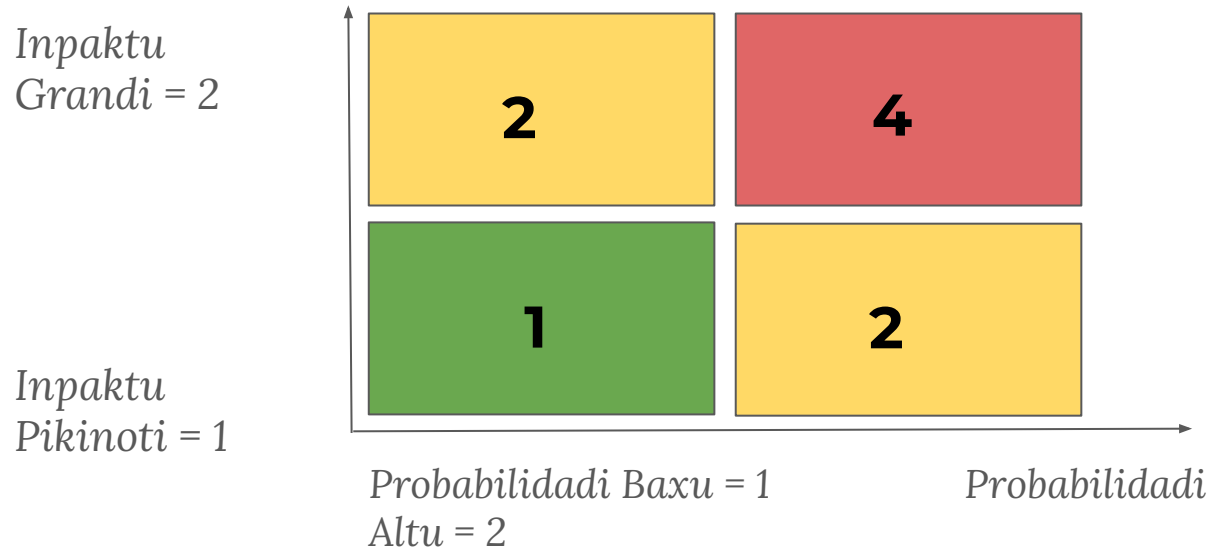
U.S. ARMY



US Army Corps
of Engineers

MODI USACE TA JERI RISKU DI TENPESTADI?

- Risku di tenpestadi é posibilidadi di un tenpestadi gravi kontise na un zona spesífiku
 - Nivel di Probabilidadi multiplikadu pa Nivel di Inpaktu



MODI USACE TA LIDA KU RISKU DI TENPESTADI?

SKODJE FERRAMENTA SERTU



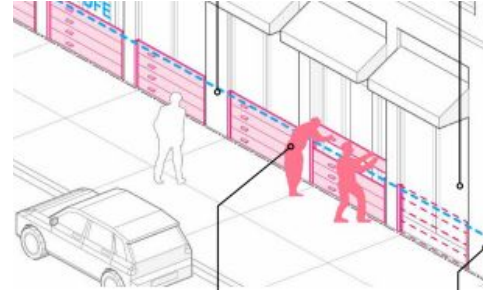
1° Gaveta: PROTEJE

Strutural



2° Gaveta: ADAPTA ô AKOMODA

Non-estruturál, Fíziku



3a Gaveta: JESTONA

Non-estruturál, No-Fíziku



U.S. ARMY

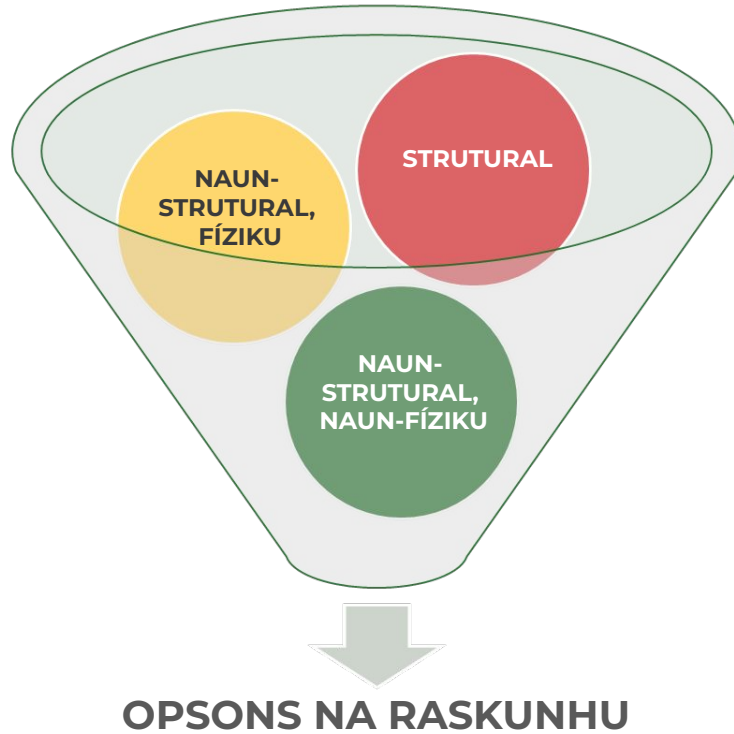


US Army Corps
of Engineers



MODI USACE TA SKODJE FERRAMENTAS PA BOSTON?

- Kuzé ta da midjór proteson?
- Kuzé k'é posível pa konstrui?
- Kuze ta konbina midjor ku Dorchester?



RELEMBRA: FERRAMENTAS DI CLIMATE READY BOSTON

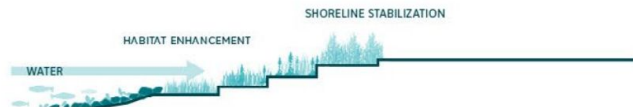
RAISED HARBORWALK / RAISED PARK SPACE



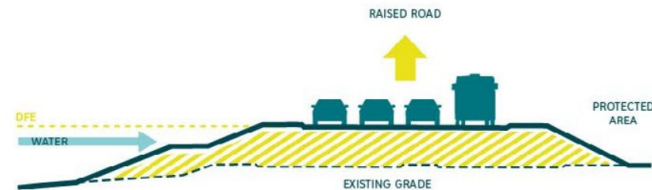
RAISED BERMS AND DUNES



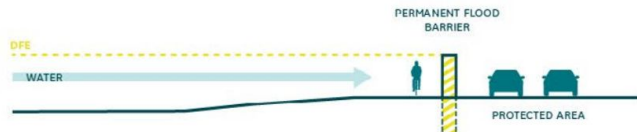
NATURE-BASED SOLUTIONS



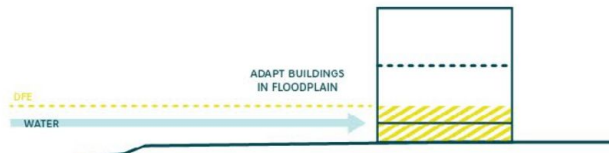
RAISED ROADWAYS / MEDIAN FLOODWALLS



VERTICAL FLOODWALLS



ADAPTED BUILDINGS AND STRUCTURES

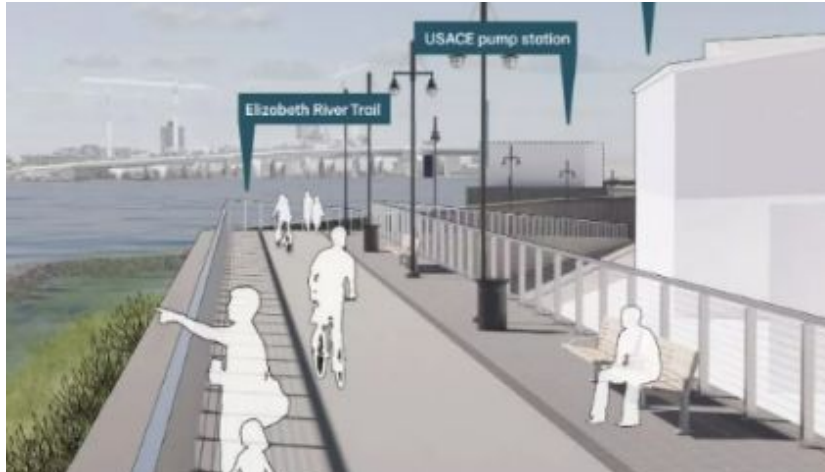


IZENPLUS DI APLIKASON DI USACE

RAISED HARBORWALK / RAISED PARK SPACE



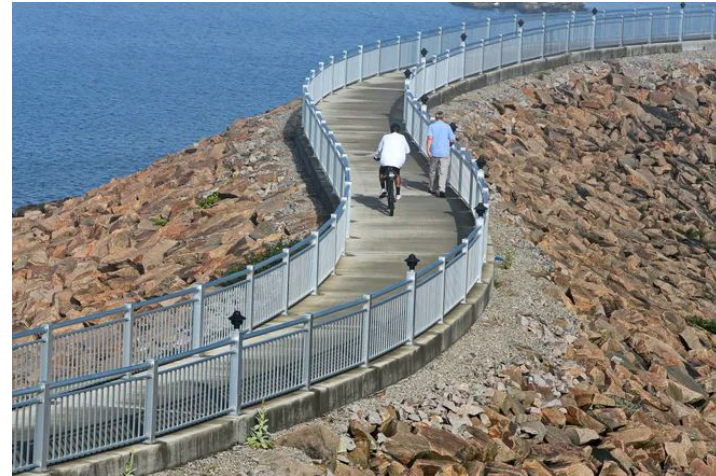
Izenplu di USACE: Norfolk, VA



RAISED BERMS AND DUNES



Izenplu di USACE: New Bedford, MA



Kréditu di Foto: Peter Pereira, The Standard-Times

IZENPLUS DI APLIKASON DI USACE

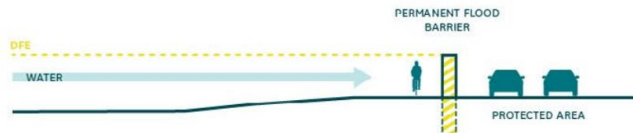


Izenplu di USACE: Norfolk, VA



Izenplu di USACE: Long Island, NY

VERTICAL FLOODWALLS



ADAPTED BUILDINGS AND STRUCTURES



MODI BO PODE DJUDA OJI:

- *Fazi perguntas*
- *Partilha bus preokupasons*
- *Djuda-nu risponde es perguntas:*
 - *Nu skesi algun zona ku risku kusteru?*
 - *Nu skesi di algun área ki nu mesti proteje?*
 - *Kuzé k'é importanti pa bô ki nu mesti sabe sobri es ferramentas ô lokal pa estruturas na raskunhu di USACE?*
 - *Modi nu pode torna es prusesu más asesível pa bô?*



Modi ta dadu feedback:



**Ben na Oráriu di
Expedienti**

VIRTUAL, TUDI SEXTA-FERA

Sexta-fera, 20 di Junhu

*10 óra di plamanhan -
meiu dia*

<https://calendar.app.google/qScfkdc9zqMwxB3n6>

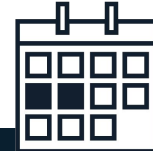


Manda komentárius online

**FORMULÁRIU DI
FEEDBACK DI STUDU**



<https://forms.gle/accbLWV33Ze4t93T7>



Fazi un markason

**VIRTUAL
(KU SIDADI Y KORPS)**



U.S. ARMY

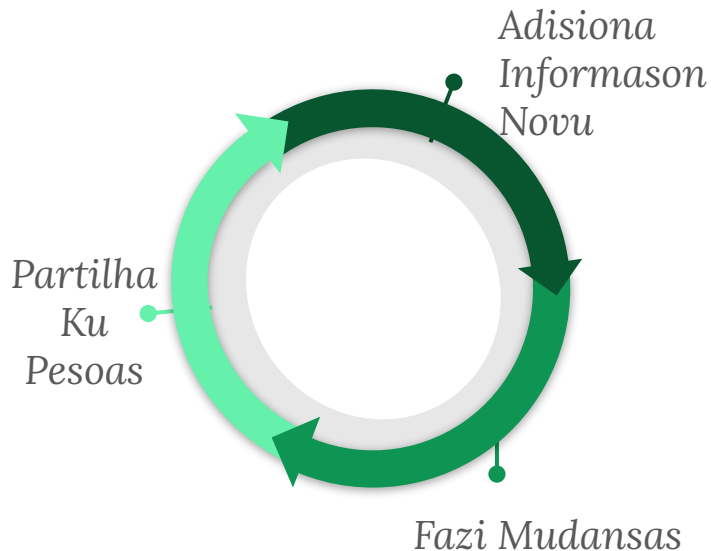


US Army Corps
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KUZÉ NU TA BEN FAZI DIPÔS:

- *Da bus resposta, di midjor forma possível*
- *Manda-u es slides di apresentason*
- *Inkontra ku bo en pesoa pa obi más sobri bus preokupasons y perguntas*
- *Reporta ku un segundu apresentason más tarde es anu (Outonu 2025)*



Lokalizasons Preliminar:

Alinhamentus na Raskunhu pa Dorchester



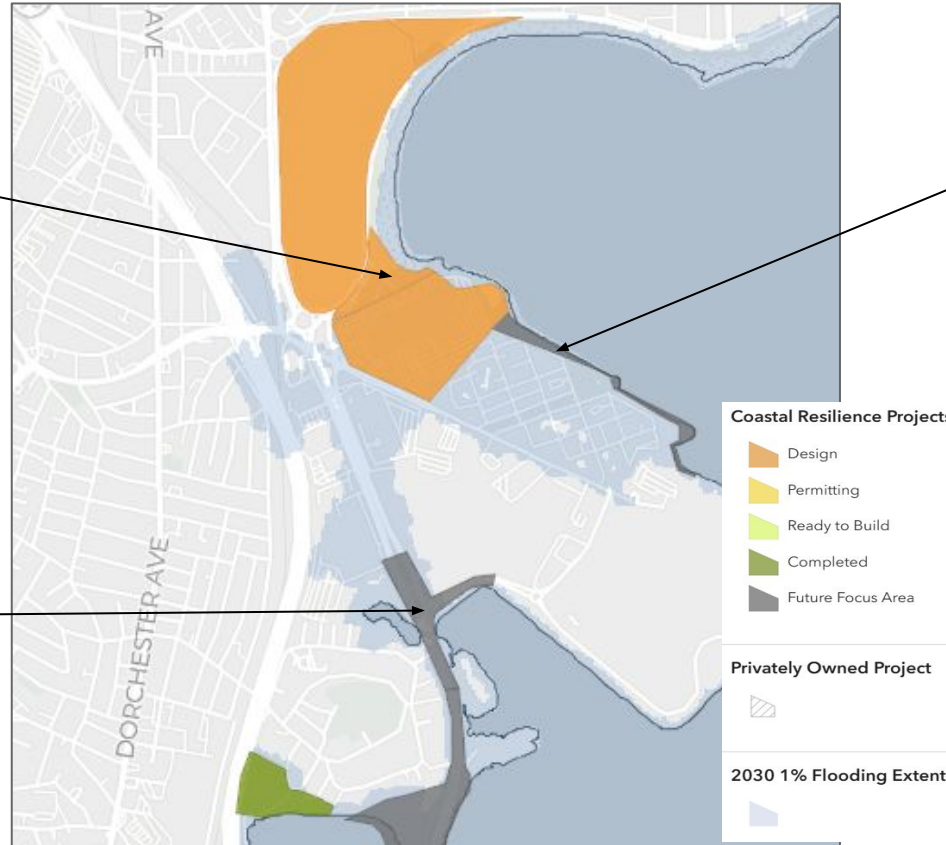
IMPLEMENTASON DI REZILIÉNSIA KOSTERU - DORCHESTER



**Moakley Park &
Moakley Connectors**
Design na andamentu



Morrissey Boulevard
*MassDOT
Ta Spera Prósimum Pasu*



**HARBOR POINT
HARBORWALK**
Zona di Foku pa Futuru

Mapa ta mostra estendimentu di inundason produzidu di Modelu di Riskus di Inundason Kosteru di Massachusetts (MC-FRM), ki é Modelu di Programa di Inundason adotadu pa Commonwealth di Massachusetts. Inundason mostradu ta konta 1% anual di xanse di tenpestadi ku proyeson di subida di maré na 2030.

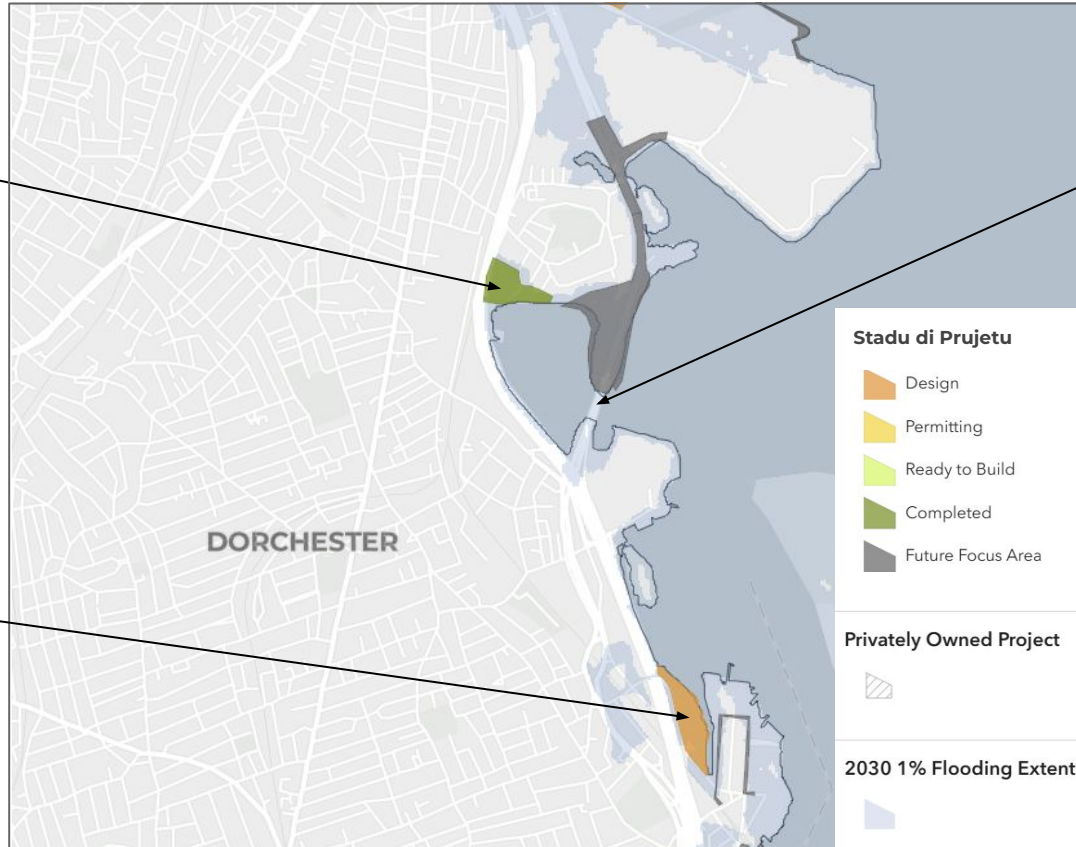
IMPLEMENTASON DI REZILIÉNSIA KOSTERU - DORCHESTER



McConnell Park
Konstruidu na 2022



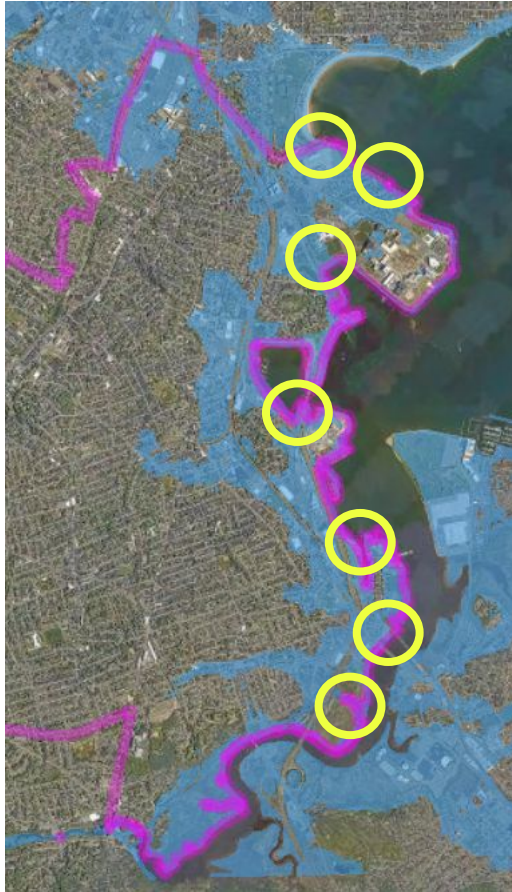
Tenean Beach
Ta Spera Prósímus Pasu



Beades Bridge
*Prujetu di MassDOT
na Fazi di Design*

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VIZON JERAL DI DORCHESTER



1. Moakley Park Southern Connector
2. HARBOR POINT HARBORWALK
3. Pattens Cove
4. Morrissey Boulevard (Seson di Meiu)
5. Tenean Beach
6. Neponset Bridge
7. DAVENPORT CREEK



1. MOAKLEY PARK SOUTHERN CONNECTOR Y

2. HARBOR POINT HARBORWALK



LEGEND

CHS Inundation Layers

CHS 1% Inundation 2090 High SLC



Flood Pathways



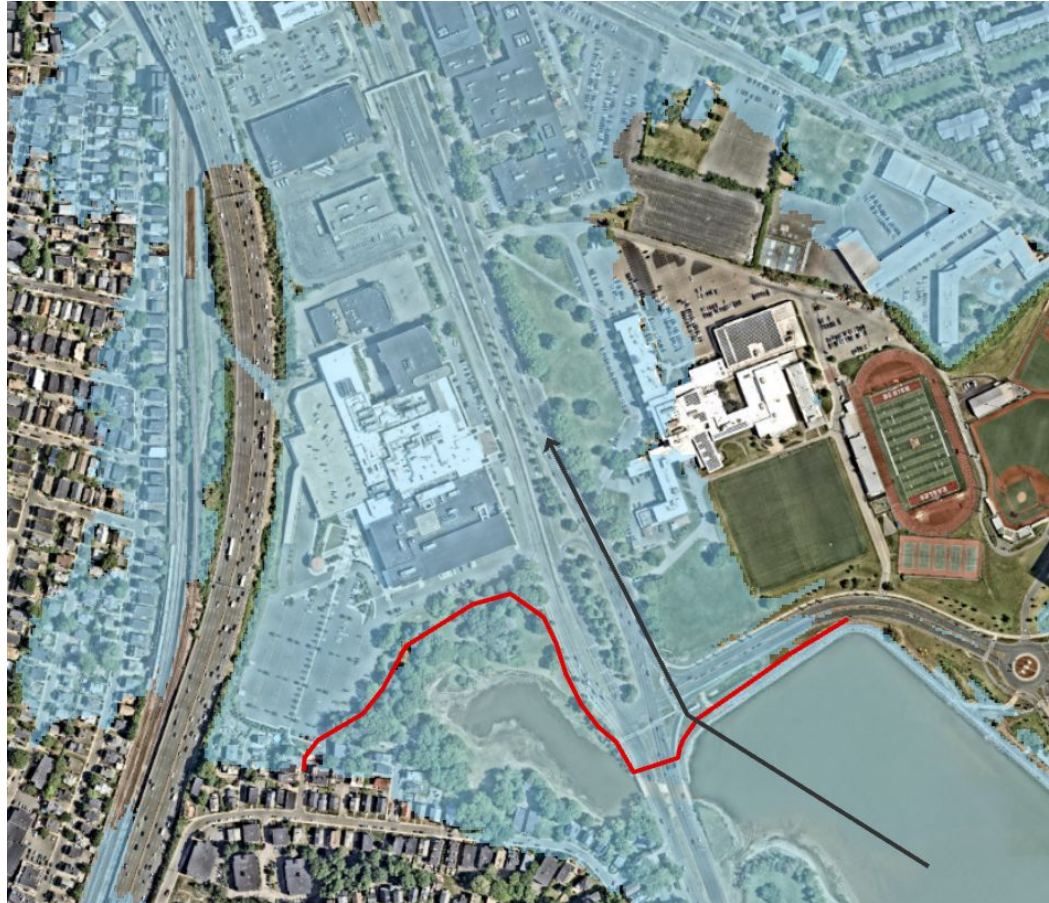
U.S. ARMY



US Army Corps
of Engineers



3. PATTENS COVE



LEGEND

CHS Inundation Layers

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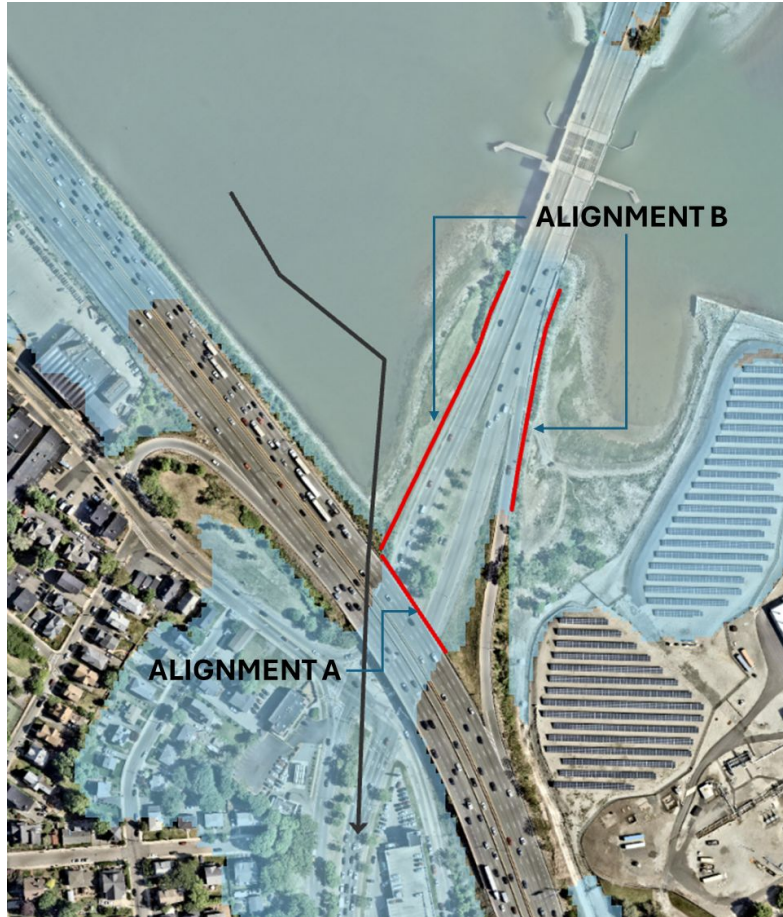
Flood Pathways



US Army Corps
of Engineers



4. MORRISSEY BOULEVARD (SESON DI MEIU)



LEGEND

CHS Inundation Layers

CHS 1% Inundation 2090 High SLC



Flood Pathways



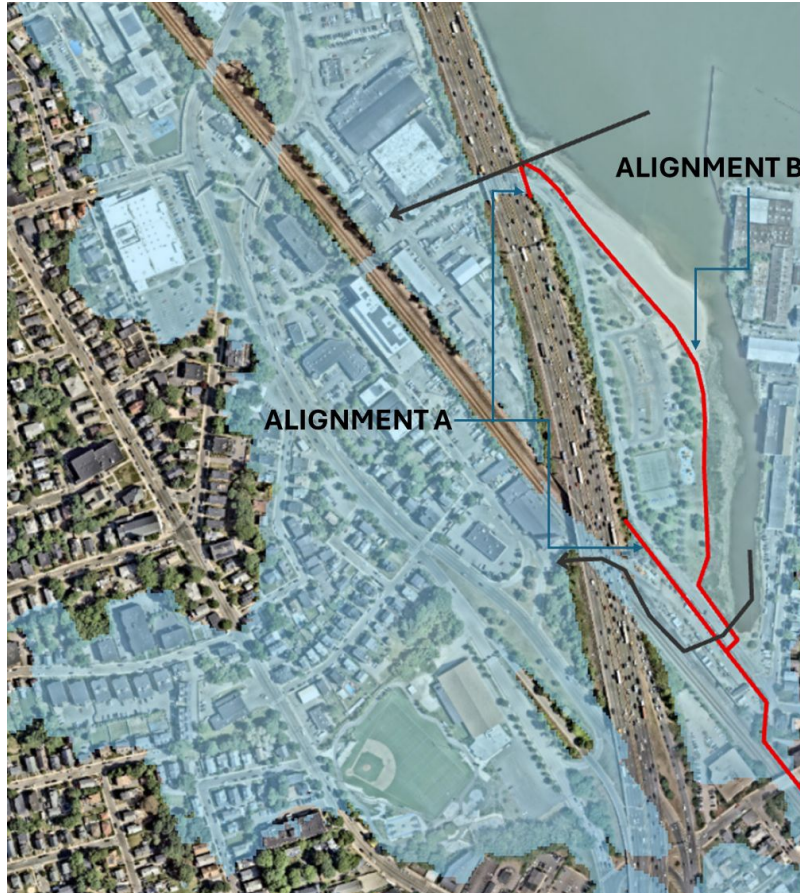
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US Army Corps
of Engineers



5. TENEAN BEACH



LEGEND

CHS Inundation Layers

CHS 1% Inundation 2090 High SLC



Flood Pathways



U.S. ARMY



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PORT NORFOLK



LEGEND

CHS Inundation Layers

CHS 1% Inundation 2090 High SLC



Flood Pathways



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6. NEPONSET BRIDGE Y

7. DAVENPORT CREEK

LEGEND

CHS Inundation Layers

CHS 1% Inundation 2090 High SLC



Flood Pathways



U.S. ARMY



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Rezumu

- *Prujetus di Longu Prazu pa Trata Riskus di Longu Prazu*
- *Foku Atual é Toma Perguntas sobri Prusesu y Zonas di Foku*
- *Feedback Posterior sobri Design (y alternativas di konstruson)*



Modi ta dadu feedback:



**Ben na Oráriu di
Expedienti**

VIRTUAL, TUDI SEXTA-FERA

Sexta-fera, 20 di Junhu

*10 óra di plamanhan -
meiu dia*

<https://calendar.app.google/qScfkdc9zqMwxB3n6>



Manda komentárius online

**FORMULÁRIU DI
FEEDBACK DI STUDU**



<https://forms.gle/accbLWV33Ze4t93T7>



Fazi un markason

**VIRTUAL
(KU SIDADI Y KORPS)**



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of Engineers



Sesión de preguntas y respuestas



City of Boston
Climate Resilience

Modi ta dadu feedback:



**Ben na Oráriu di
Expedienti**

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