



MUNICIPALITY
OF VÄSTERVIK

2020-05-29



STØTTET AF

Promilleafgiftsfonden for landbrug

Waterdrive

 **Interreg**
Baltic Sea Region



The Västervik method

1. Comprehensive Action plan
2. Kick off meetings in sub-areas with focus groups
3. Create interest in measures and find interested landowners
4. Individual advice - Choice of measures and location in cooperation with farmers, SWOT analyses. Multifunction in focus.
5. Help with design of measure, contact with entrepreneurs, and government contacts
6. Applications of (national and regional) grants for measures in cooperation with landowners

Local municipality strategy for reducing nutrient load 2017



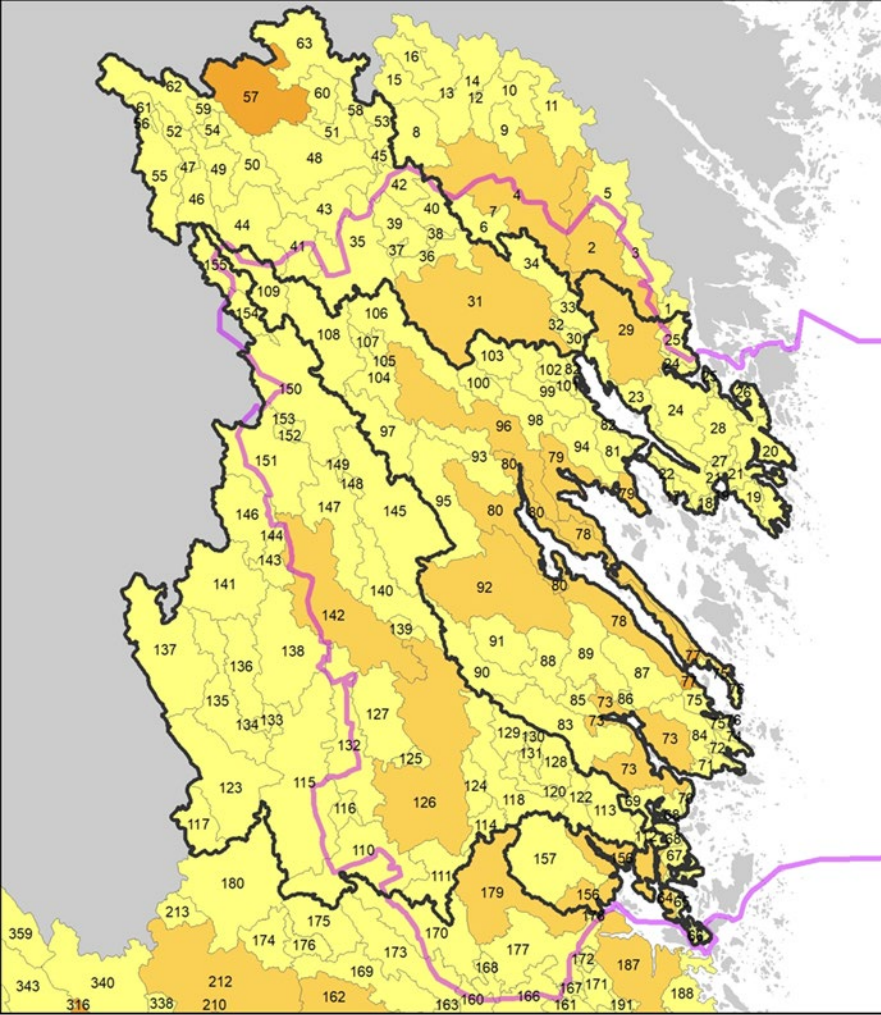
Lokal Åtgärdsplan för minskad
övergödning i Västerviks kommuns
kustvatten 2017-2021



Västerviks  Kommun

Antaget av KS 2017-05-22
Uppdaterad med ny Vision 2030 antagen av KF 2017-06-19

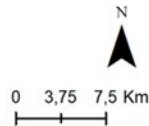
Modelling in a large scale



Teckenförklaring

- Huvudavrinningsområde (HARO)
- Kommungräns

Belastning kväve netto (kg/år)



SWOT analysis

On field - meeting with landowners and farmers

1. Optimize the plant environment by efficient nutrients use (advice, adapted crops, increased root growth, adapted fertilization and improved soil structure)
2. Keep the nutrients in the soil profile (reduces erosion, reduce soil compaction, improve soil structure, increase soil fertility)
3. Stop the load of nutrients before it reaches the sea (sedimentation ponds, wetlands)



Challenges!



Flooding



Erosion

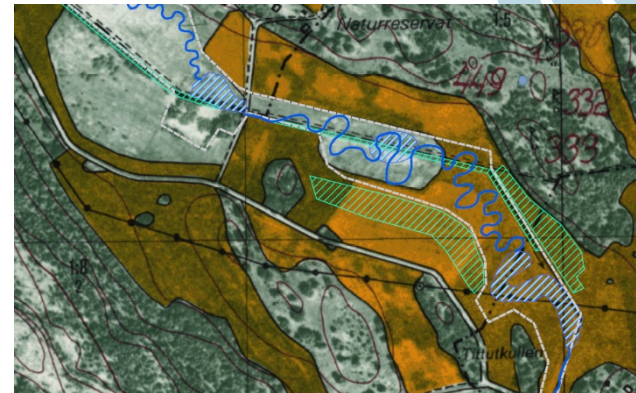
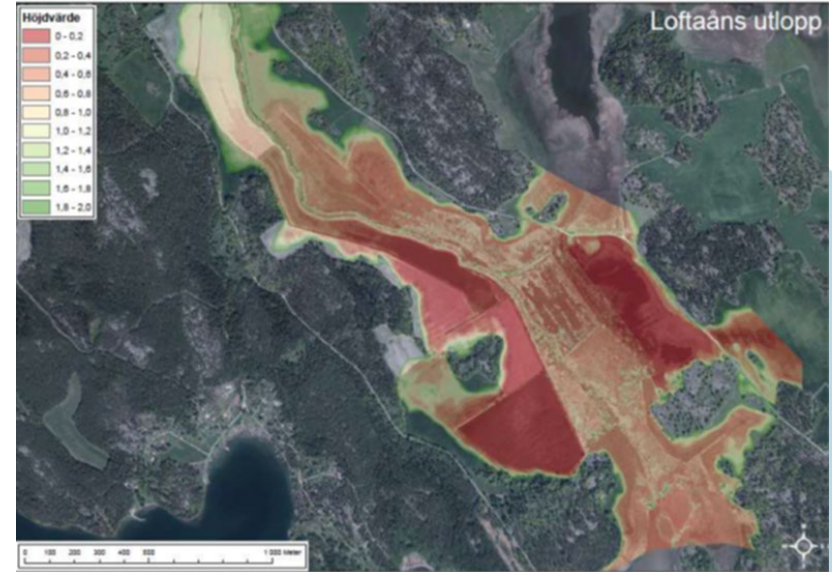
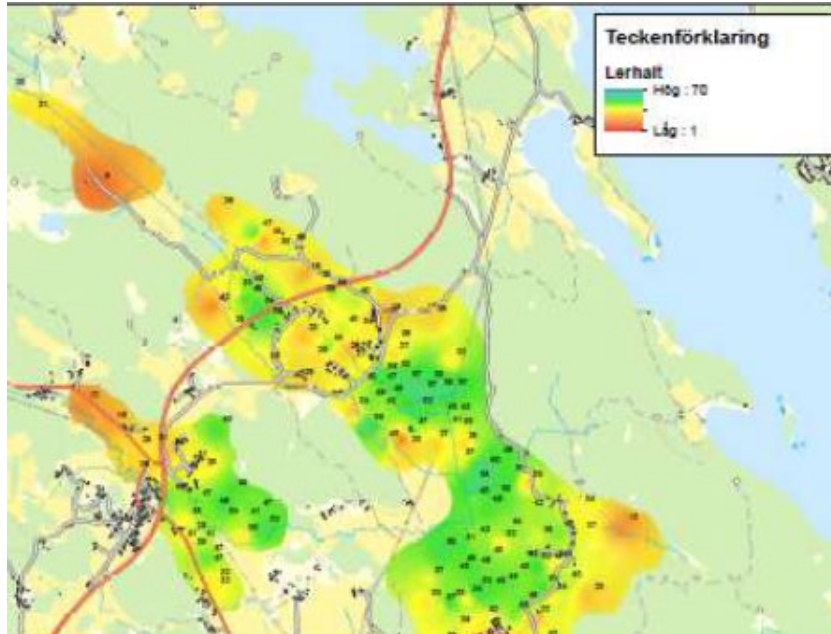


Draought



Better water quality
Higher agriculture production
Circular economy
Public awareness

GIS analyses and Soil mapping





Structure liming





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Wetlands and phosphorus ponds





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Two step ditches





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Filter ditches (lime and biochar)





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Lofta River

Measures planned 2018-2021

Measure	Areal	P decrease	Year	Costs Euro
Soil mapping	850 ha	130	2019-2020	40 000
Structure liming	550 ha	85	2019-2020	350 000
Small wet-lands and Phosphorous ponds	10 ha	100	2019-2020	200 000
Bevelling ditches	50 ha	40	2020-2021	250 000
Two stage ditches	500 meter	130	2020-2021	125 000

+ Project management, monitoring etc 100 000 Euro

Area ha Farmland 2 700 ha



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Lofta River

Implementation of measures

Measure 2018/19	Areal	P decrease kg/year
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Soil mapping	600 ha	110
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Structure liming	450 ha	70
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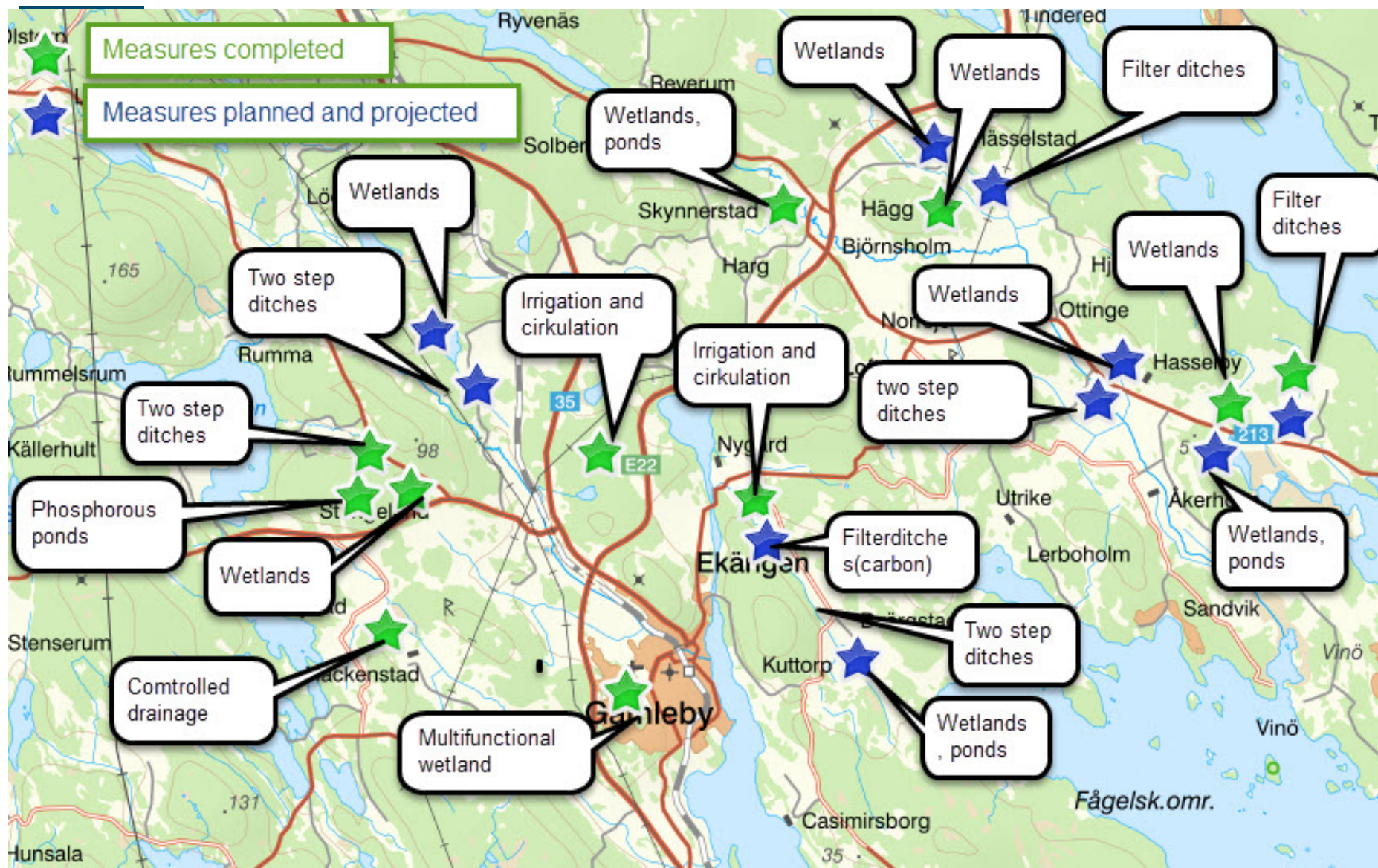
Small wet-lands	4 ha	40
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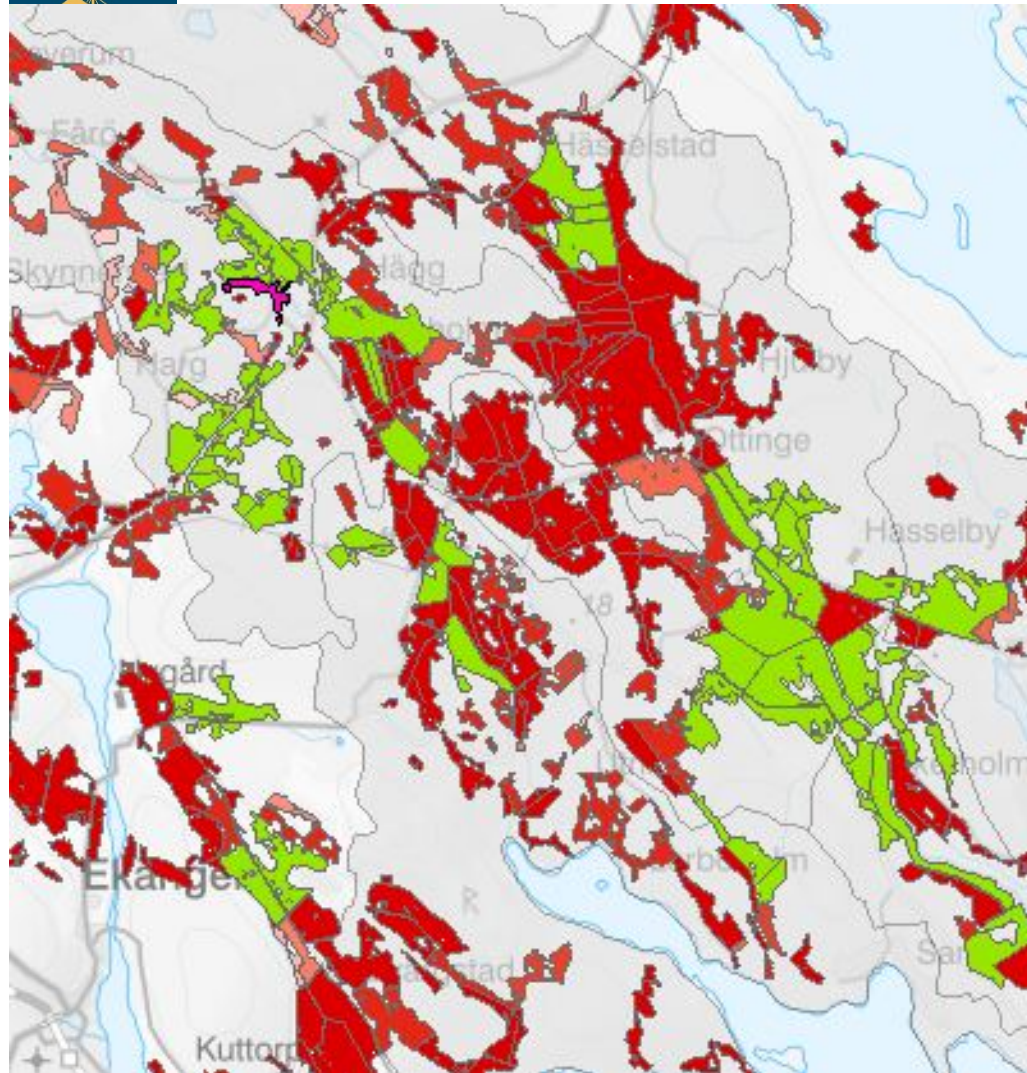
Phosphorous ponds		
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Filter ditches	0 meter	
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Two stage ditches	0 meter	
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Structure liming

Red = possible fields - planned

Green = measures completed





Västervik Case area

Measures planned 2021-2024

Measure	Total	P decrease kg/y	Lofta	Gby	St	Bo
Structure liming	1150 ha	180	550	400	350	350
Small wet-lands and Phosphorous ponds	25 ha	250	10	4	7	7
Filter ditches	50 ha	1600	50	50	50	50
Two stage ditches	9 km	2340	1 km	3 km	3 km	2 km
Irrigation and circulation	670 ha	2000		250 ha		420 ha



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