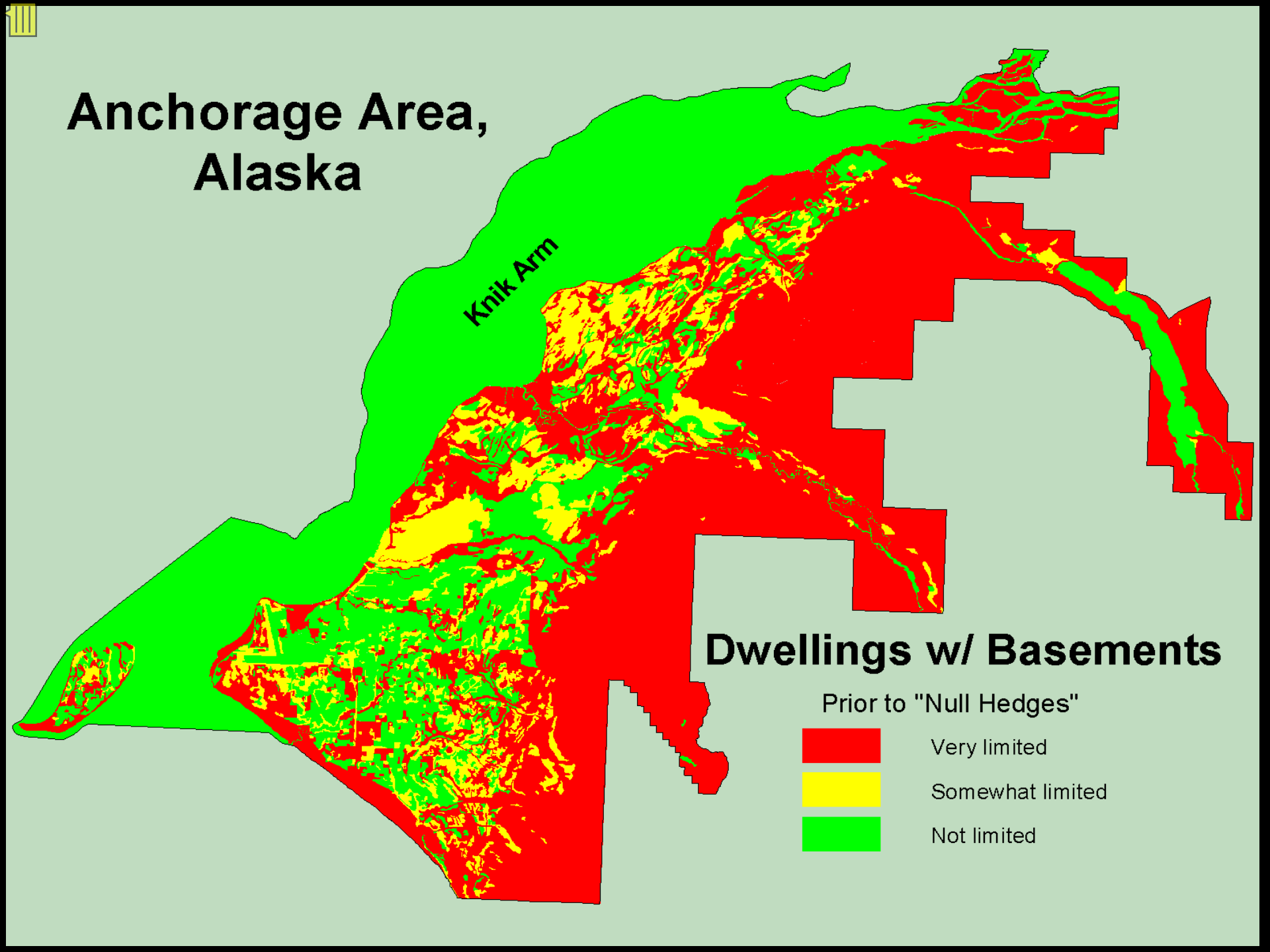
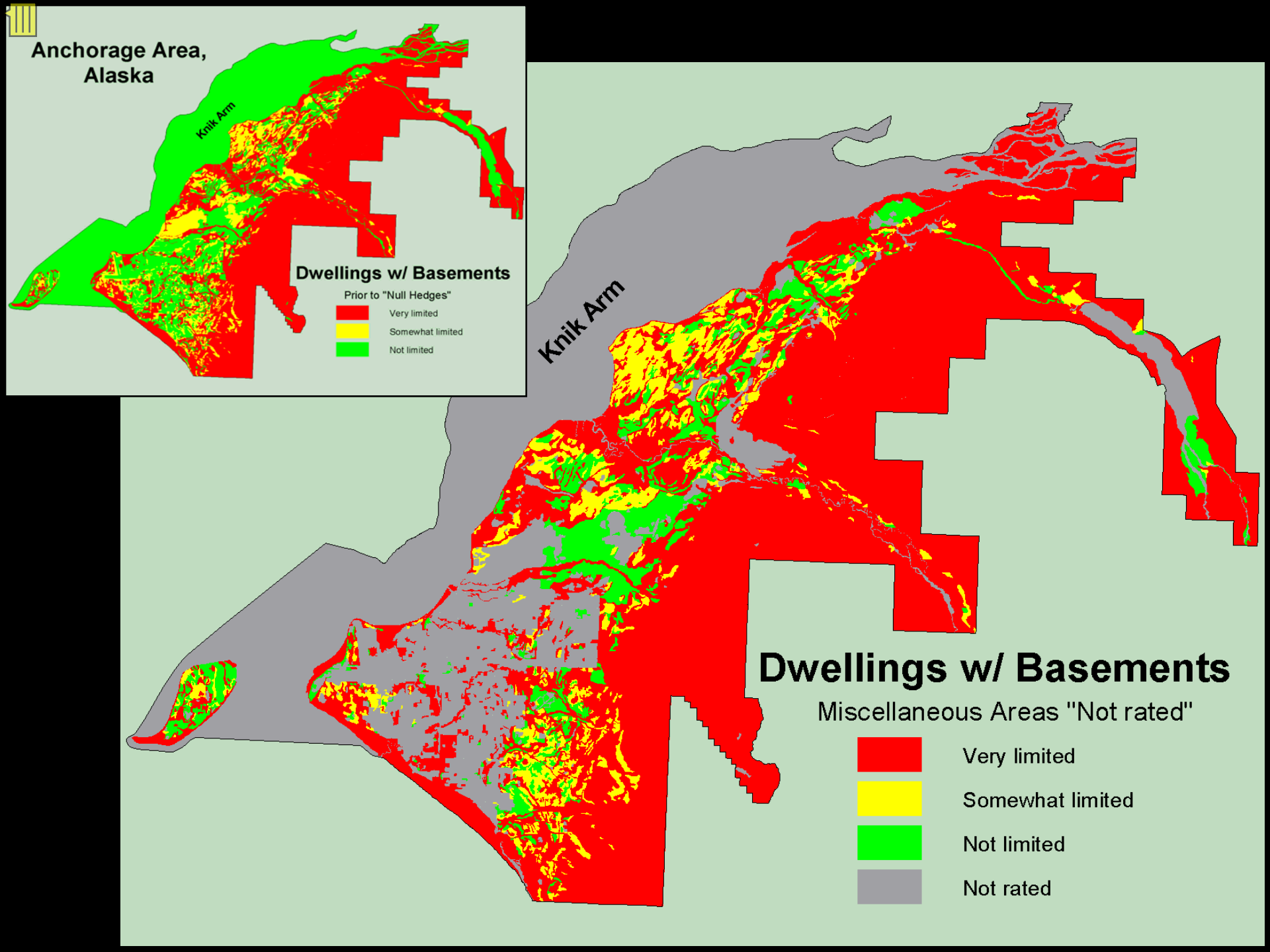
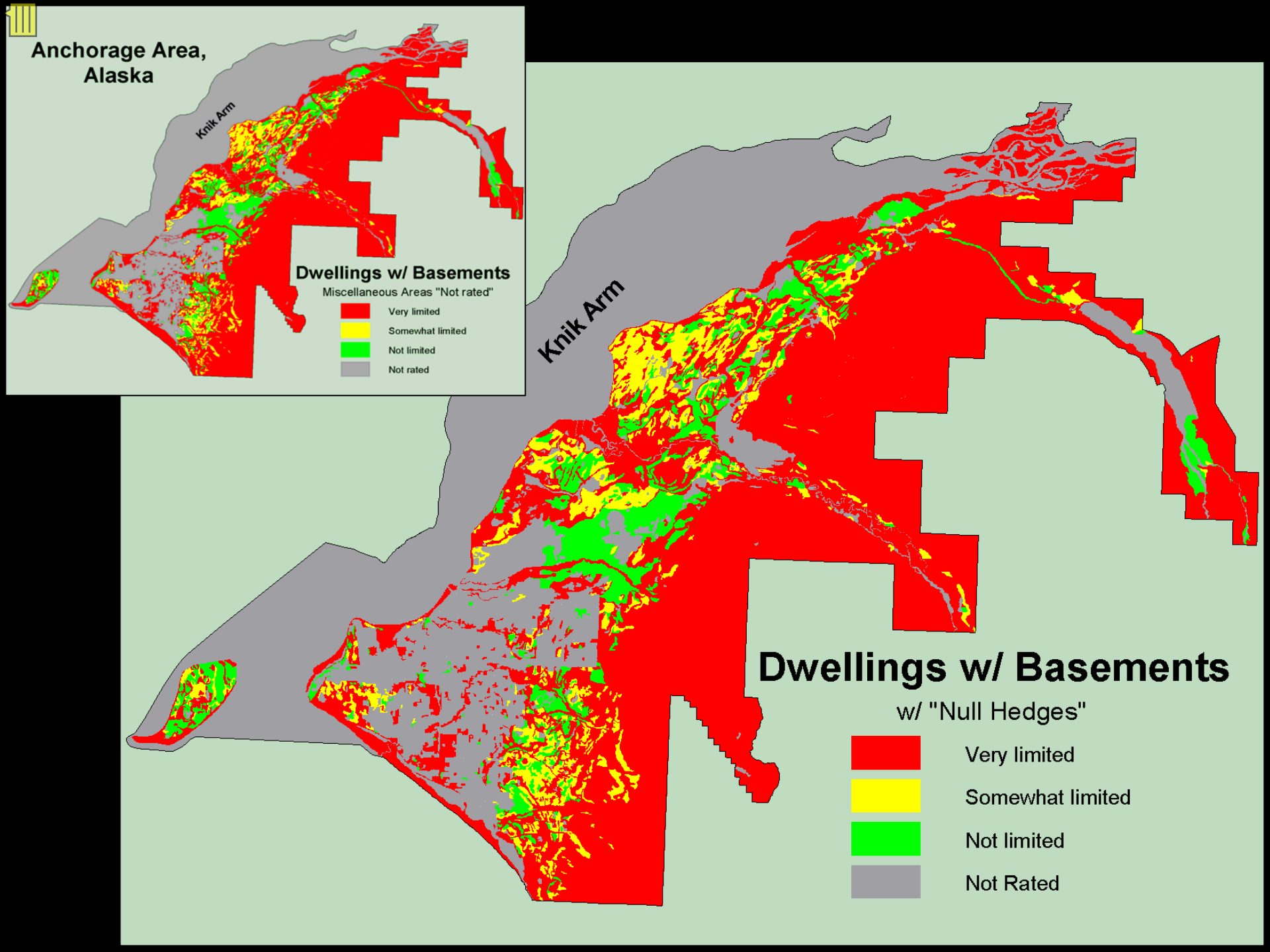

Anchorage Area,
Alaska
Knik Arm
Dwellings w/ Basements
Prior to "Null Hedges"
Very limited
Somewhat limited
Not limited


Anchorage Area,
Alaska
Knik Arm
Dwellings w/ Basements
Prior to "Null Hedges"
Very limited
Somewhat limited
Not limited
Knik Arm
Dwellings w/ Basements
Miscellaneous Areas "Not rated"
Very limited
Somewhat limited
Not limited
Not rated


Anchorage Area,
Alaska
Knik Arm
Dwellings w/ Basements
Miscellaneous Areas "Not rated"
Very limited
Somewhat limited
Not limited
Not rated
Knik Arm
Dwellings w/ Basements
w/ "Null Hedges"
Very limited
Somewhat limited
Not limited
Not Rated

Interior Alaska - Discontinuous Permafrost

National Top Rule	Goldstream-Nenana (1972) *Converted SSSD Survey*	Copper River (1984) *Converted SSSD Survey*	Greater Fairbanks (2001) *Modern NASIS Survey*
	---------- Percent of Major Components "Not rated" ----------		
ENG – Septic Tank Absorption Fields	100	11	9
ENG – Dwellings w/ Basements	100	11	9
ENG – Daily Cover for Landfill	100	43	16
ENG – Local Roads and Streets	100	33	9
ENG – Construction Materials; Gravel Source	100	43	26
URB/REC – Paths and Trails	100	48	98
Percent Miscellaneous Area Components			6

South Central Alaska - No Permafrost

National Top Rule	Homer-Ninilchik (1963) *Converted SSSD Survey*	Lower Kenai (1994) *Converted SSSD Survey*	Anchorage (2000) *Modern NASIS Survey*
	---------- Percent of Major Components "Not rated" ----------		
ENG – Septic Tank Absorption Fields	100	13	11
ENG – Dwellings w/ Basements	100	13	10
ENG – Daily Cover for Landfill	100	17	21
ENG – Local Roads and Streets	100	13	11
ENG – Construction Materials; Gravel Source	100	16	18
URB/REC – Paths and Trails	100	23	95
		Percent Miscellaneous Area Components	10

New “null hedge” interpretations

- Applicable only with new or updated NASIS data
  - Update strategy
    - selected data elements in order to make work
    - comprehensive update of survey
- Still in need of some ‘fine tuning’
  - Known problems
    - Organic layers
    - Permafrost layers

Organic layers

- **Which NASIS data elements are applicable to organic layers and what are the standards for populating those elements?**

- **How do we refine our interpretive rules to reliably interpret a layer, regardless of whether it is mineral or organic?**

- **What is the surface layer of interest for our interpretations and is it the same for all interpretations?**

Permafrost layers

- Which NASIS data elements apply to permanently frozen layers and what are the rules for populating those elements?

- Do we interpret permanently frozen layers as restrictive features or as ‘normal’ soil layers

New “null hedge” interpretations

- **Have the potential to provide complete control over which components are rated and which are not**
- **Provide the opportunity to refine or establish data standards and a minimum data set for interpretations**
- **Provide an effective tool to check the completeness and quality of survey area data**

Which set of interpretations do we use?

- New “null hedge” interpretations
  - Must update data!
- Original “pre null hedge” interpretations
  - Exist only in existing SSURGO v2 exports and Access templates!
- Ames legacy interpretations
  - Still valid!

Legacy Interpretations - Construction Materials

Matanuska-Susitna Valley Area, Alaska

Map Symbol and Map Unit Name Component	Roadfill	Sand	Gravel	Topsoil
101: BENKA SILT LOAM, 0 TO 3 PERCENT SLOPES				
BENKA	Fair: frost action	Probable:	Improbable: too sandy	Poor: thin layer, too sandy
140: GOLDCORD-TSADAKA COMPLEX, 0 TO 30 PERCENT SLOPES				
GOLDCORD	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: depth to rock, slope, small stones
TSADAKA	Poor: cemented pan	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, cemented pan, small stones
167: KNIK SILT LOAM, UNDULATING				
KNIK	Fair: frost action	Probable:	Probable:	Poor: area reclaim, small stones, too sandy
184: SIWASH-TALKEETNA, COOL-SNOWDANCE ASSOCIATION, 0 TO 30 PERCENT SLOPES				
SIWASH	Poor: depth to rock, frost action	Improbable: excess fines	Improbable: excess fines	Poor: depth to rock, slope, small stones
SNOWDANCE	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, small stones, wetness
TALKEETNA COOL	Fair: dense layer, frost action, slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, slope, small stones
206: WHITSOL SILT LOAM, COOL, SLOPING AND MODERATELY STEEP				
WHITSOL COOL, MODERATELY STEEP	Poor: frost action	Improbable: excess fines	Improbable: excess fines	Good:
WHITSOL COOL, SLOPING	Poor: frost action	Improbable: excess fines	Improbable: excess fines	Good:

Mapunit Descriptions

Anchorage Area, Alaska

Note, data applies to the entire extent of the mapunit within the survey area. Mapunit and soil properties for a specific parcel of land may vary somewhat and should be determined by on-site investigation.

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429 - Kashwitna-Kichatna complex, 12 to 20 percent slopes

Mean annual precipitation: 14 to 20 inches
Mean annual temperature: 29 to 43 degrees F
Frost-free period: 105 to 135 days

HEL, mapunit: highly erodible land
HEL, water: highly erodible land
HEL, wind: highly erodible land

Kashwitna and similar soils

Extent: 30 to 90 percent of the unit
Landform(s): hill
Slope gradient: 12 to 20 percent
Parent material: coarse-silty loess over gravelly outwash
Restrictive feature(s): none
Seasonal high water table: greater than 60 inches
Flooding hazard: none
Ponding Hazard: none

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 1
Wind erodibility index (WEI): 160
Land capability class, non-irrigated: 6e
Drainage class: well drained
Hydric soil: no
Hydrologic group: B
Potential frost action: high

Representative soil profile:

		Texture	Permeability	Available Water Capacity	pH	Kw	Kf
Oe	0 to 3 in	moderately decomposed plant material	moderately rapid	1.0 to 1.1 in	4.0 to 5.5		
E	3 to 5 in	silt loam	moderate	0.6 to 0.7 in	5.1 to 6.0	.32	.37
Bs	5 to 16 in	silt loam	moderate	3.4 to 4.1 in	5.1 to 6.0	.32	.37
2BC	16 to 18 in	gravelly sandy loam	moderately rapid	0.1 to 0.2 in	5.6 to 6.5	.10	.24
2C	18 to 60 in	very gravelly sand	rapid	1.3 to 2.1 in	5.6 to 6.5	.05	.24

Kichatna and similar soils

Extent: 10 to 70 percent of the unit
Landform(s): hill
Slope gradient: 12 to 20 percent

Soil loss tolerance (T factor): 1
Wind erodibility group (WEG): 1
Wind erodibility index (WEI): 160

AK610 - Greater Fairbanks Area, Alaska

Table K1b_1. Water Features

(See text for definitions of terms used i …… in the depth of water
on the surface. Soil moisture status …… w the soil surface.)

Map symbol and soil name	Hydrologic group	Month	……	Soil Moisture Status	
				Depth	Status
				In.	
162:					
Salchaket	B	Apr	……	0- 8	Wet
			……	8-18	Wet, frozen
			……	18-72	Dry to moist
		May	……	0-12	Wet
			……	12-22	Wet, frozen
			……	22-72	Dry to moist
		Jun-Sep	……	0-72	Dry to moist

2FP3–

Boreal Flood Plains with Discontinuous Permafrost

(Typic Cryofluvents-Fluvaquentic Historthels-Typic Cryorthents Complex)

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Boreal-riparian forested loamy mid flood plains

Soil name: **Typic Cryofluvents and similar soils**

Extent: **15 to 50 percent of the map unit**

Landform: **flood plains**

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Boreal-riparian forested loamy high flood plains, frozen

Soil name: **Fluvaquentic Historthels and similar soils**

Extent: **20 to 60 percent of the map unit**

Landform: **flood plains**

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Boreal-riparian forested gravelly mid flood plains

Soil name: **Typic Cryorthents and similar soils**

Extent: **20 to 50 percent of the map unit**

Landform: **flood plains**

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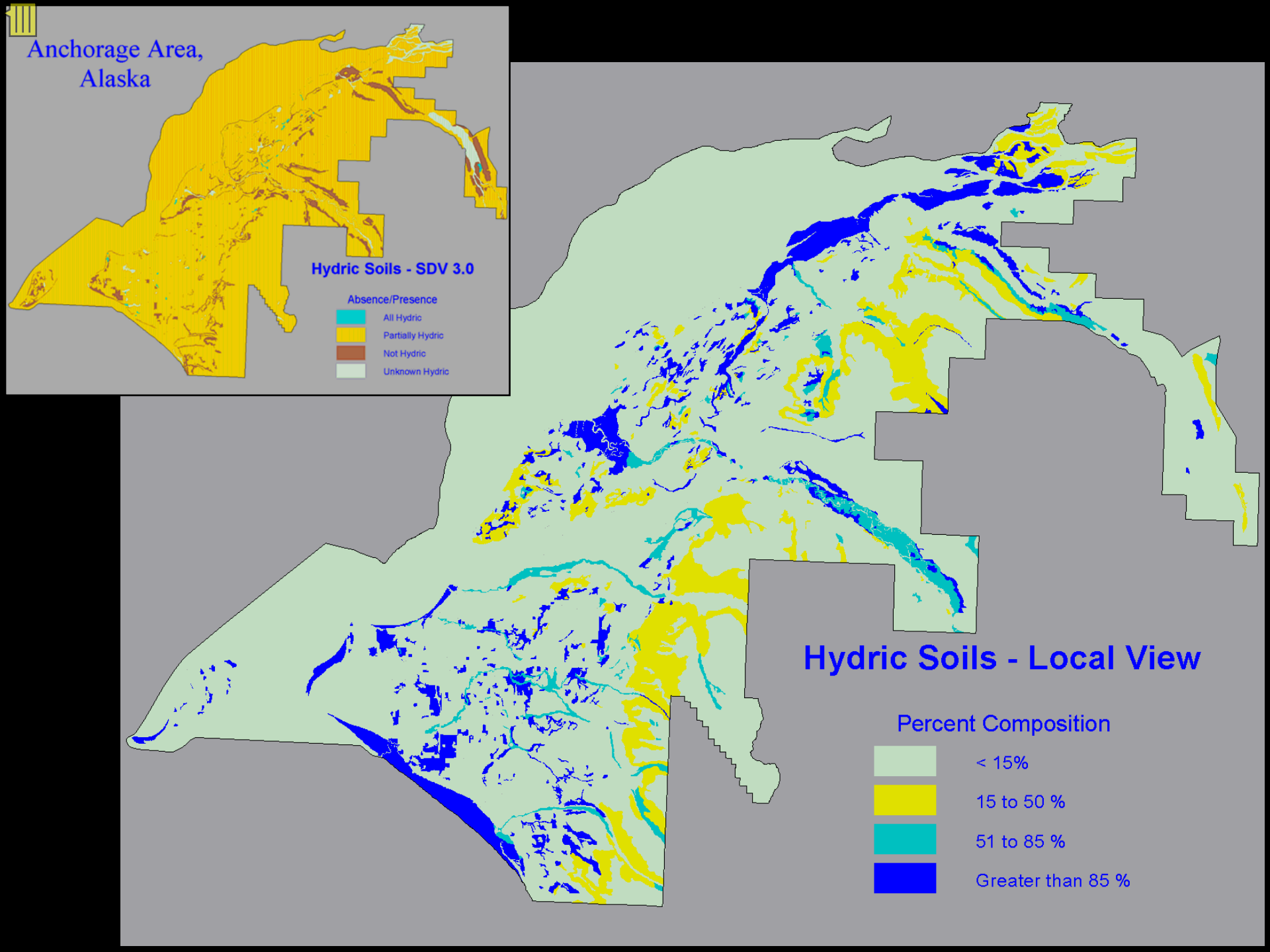
Anchorage Area,
Alaska
Hydric Soils - SDV 3.0
Absence/Presence
All Hydric
Partially Hydric
Not Hydric
Unknown Hydric
Hydric Soils - Local View
Percent Composition
< 15%
15 to 50 %
51 to 85 %
Greater than 85 %