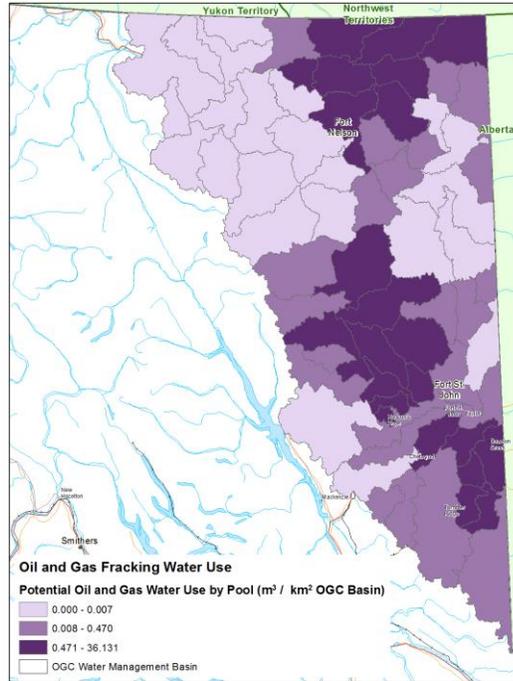
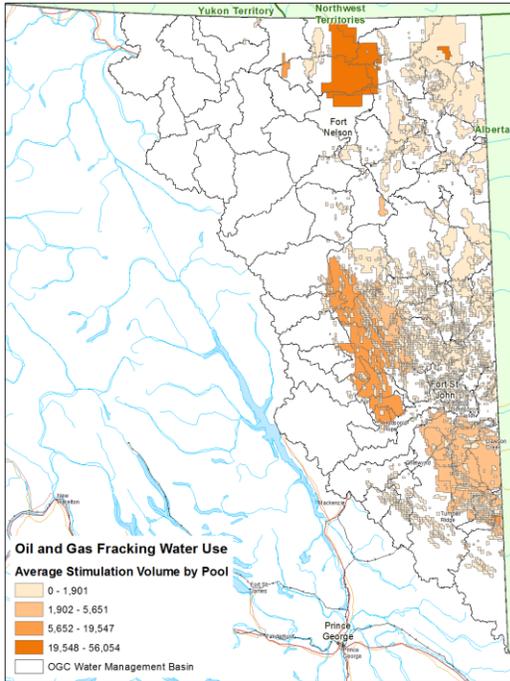
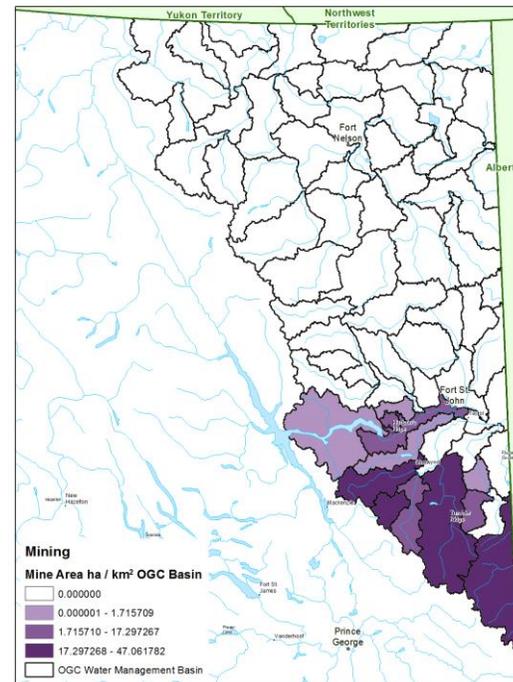
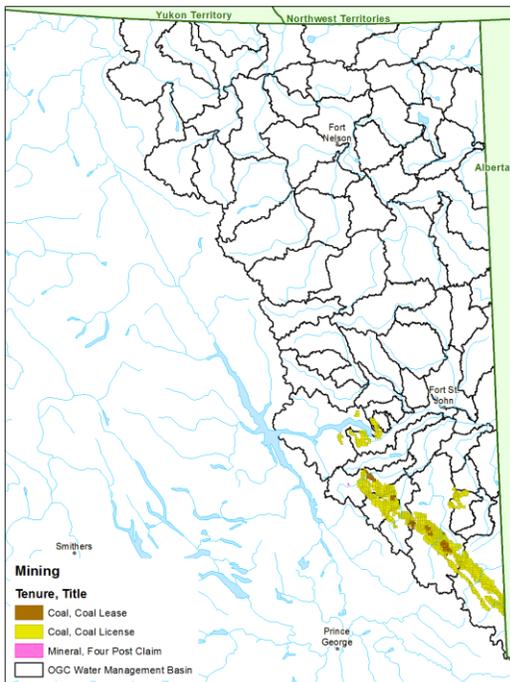


## Appendix A – Data Layers for Surface Water Quantity

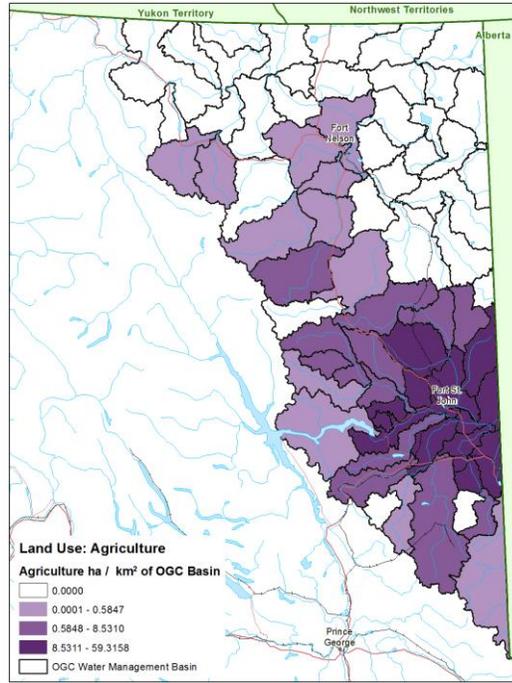
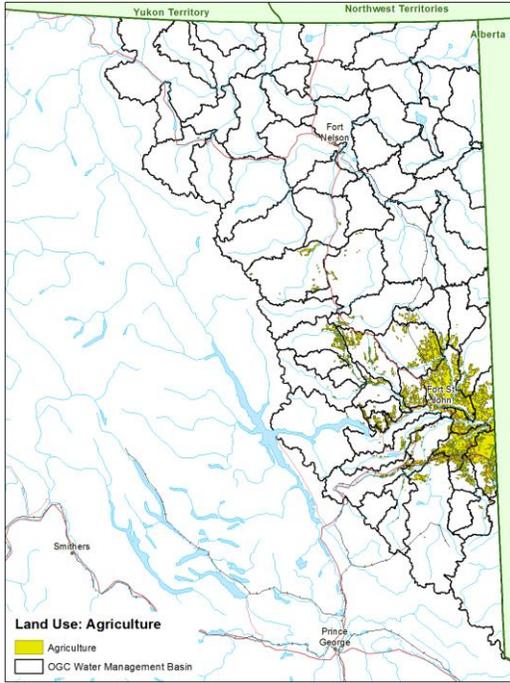
Future demand – potential oil and gas surface water consumption



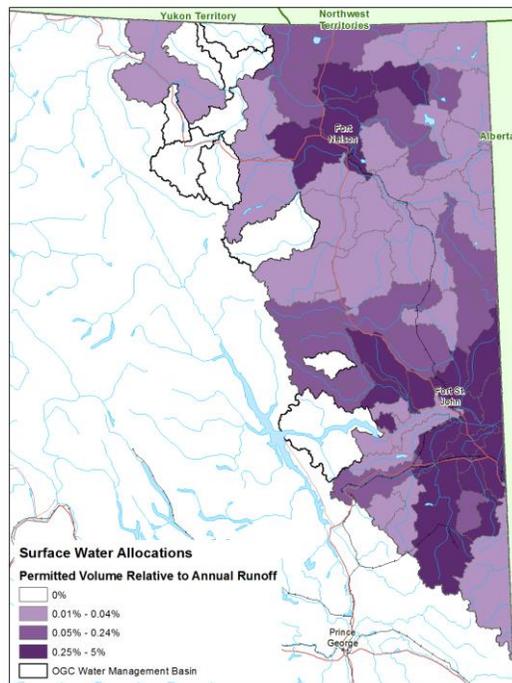
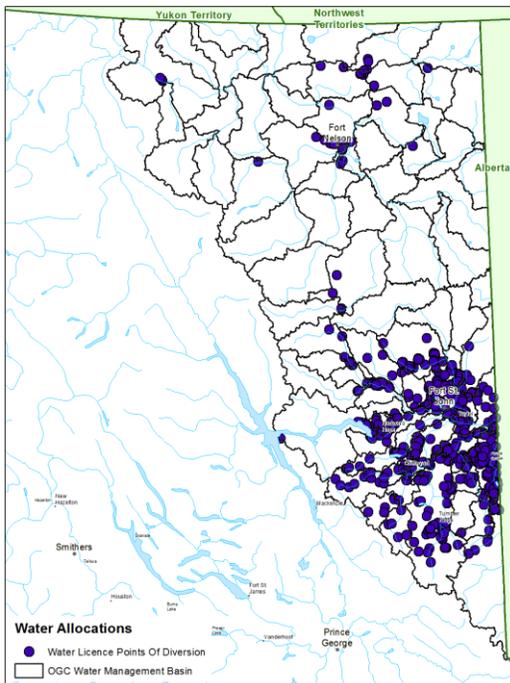
Future demand – potential surface water consumption by mining



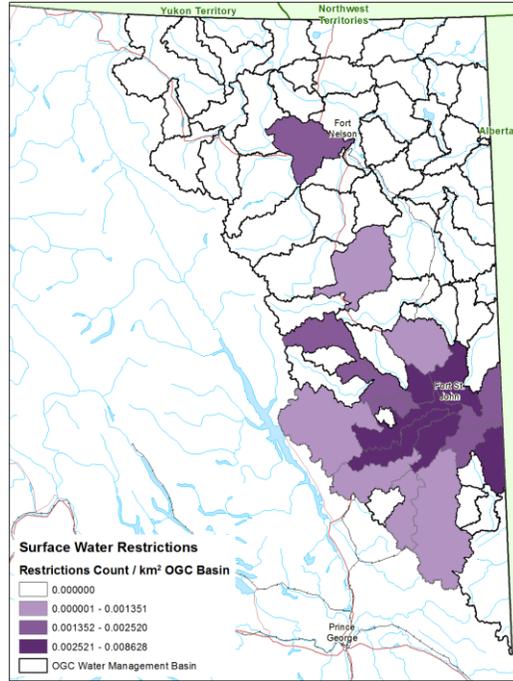
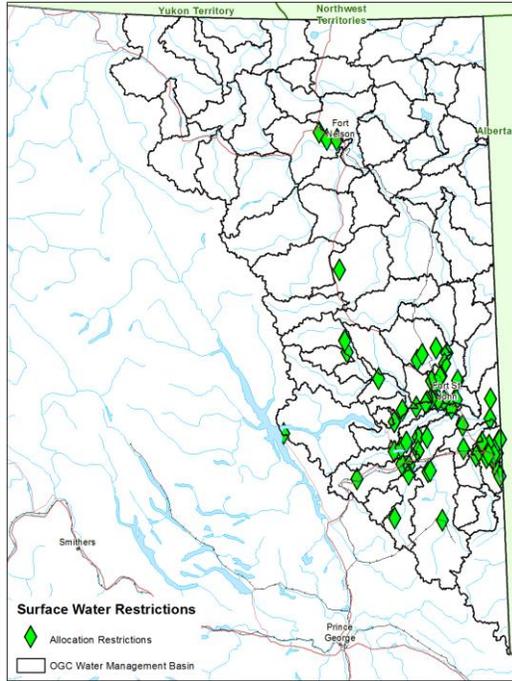
Future demand – potential surface water consumption by agriculture



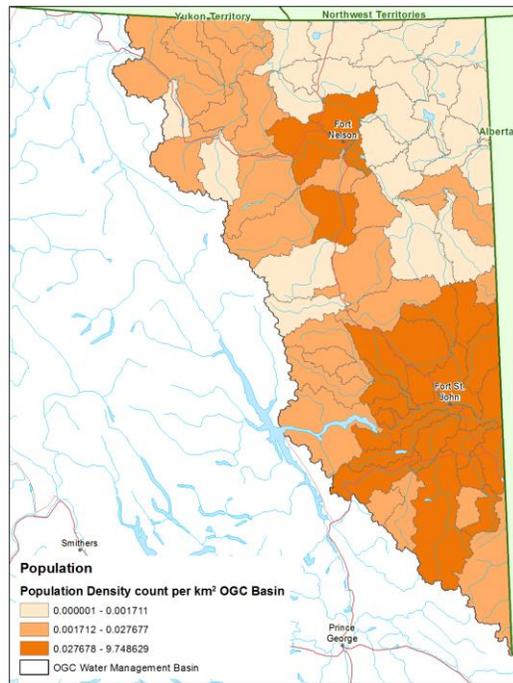
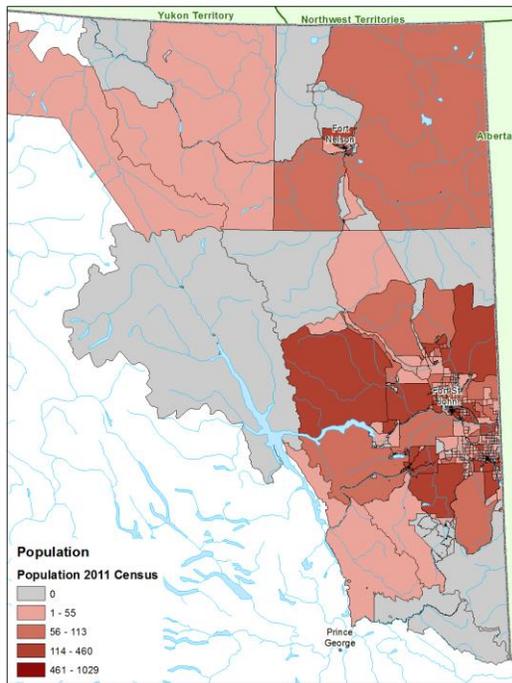
Current demand versus supply –water allocation relative to mean annual discharge surface water



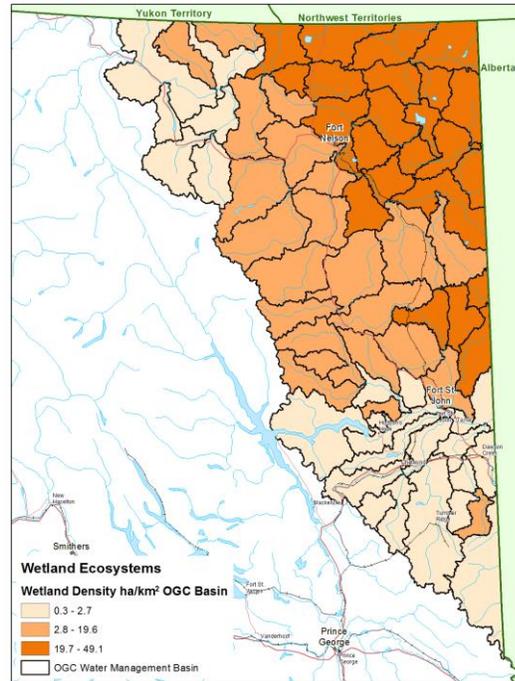
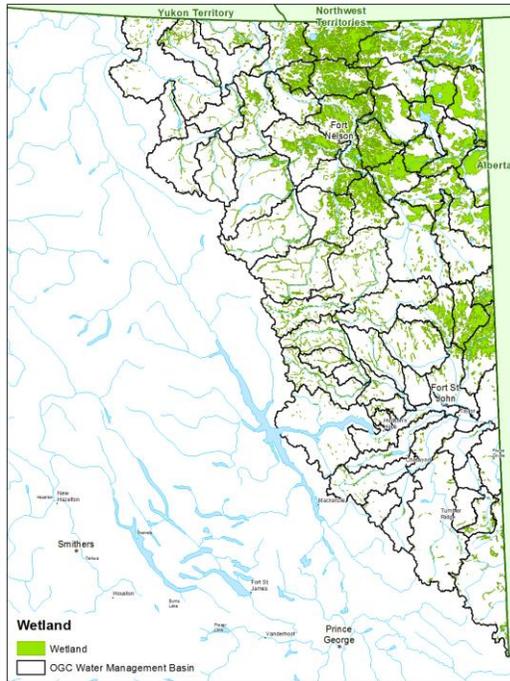
Current demand versus supply – restrictions on surface water use



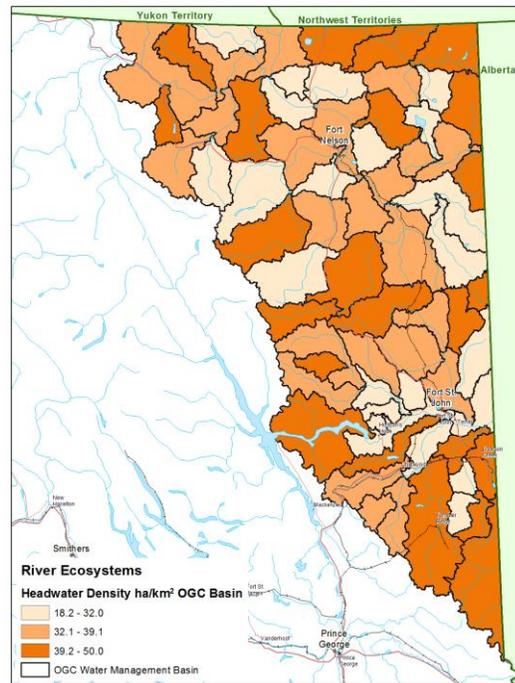
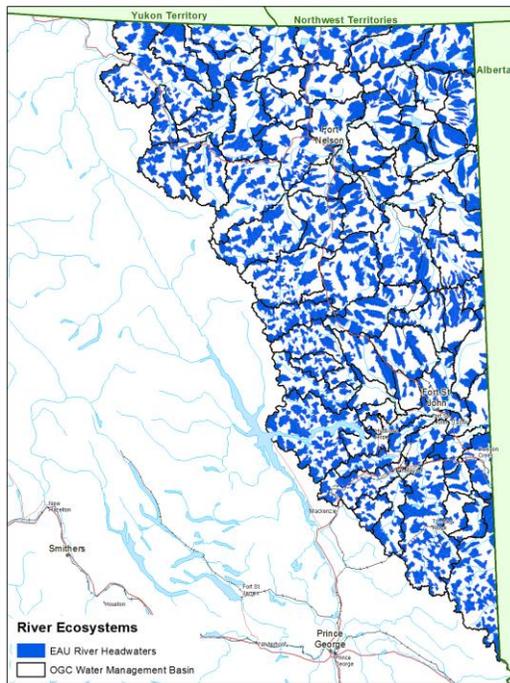
Sensitivities – rural and domestic water use - Population



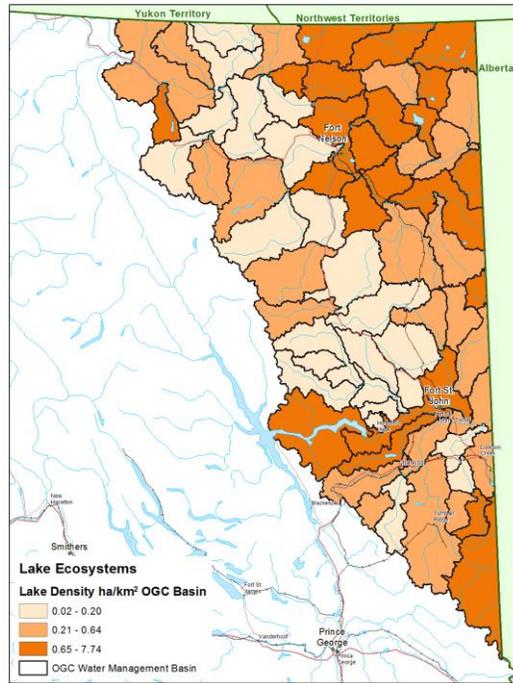
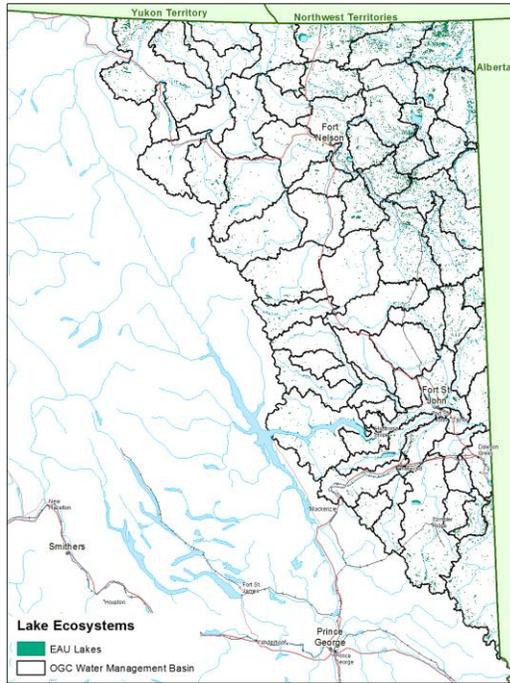
Sensitivities – aquatic ecosystem sensitivity - wetland density per watershed



Sensitivities – aquatic ecosystem sensitivity - river headwater density per watershed

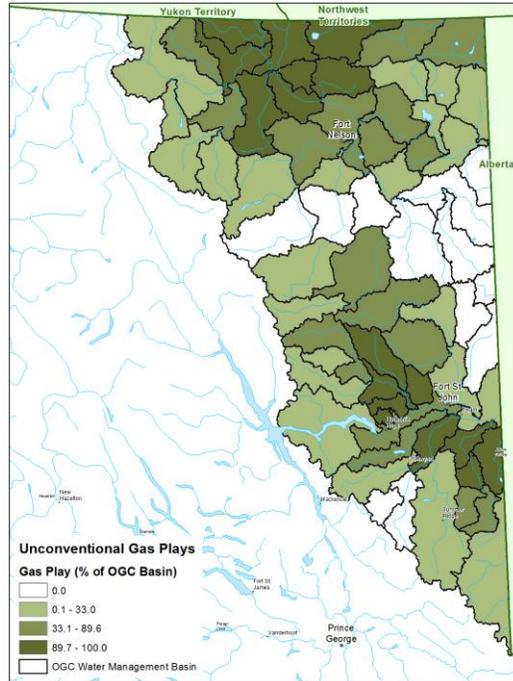
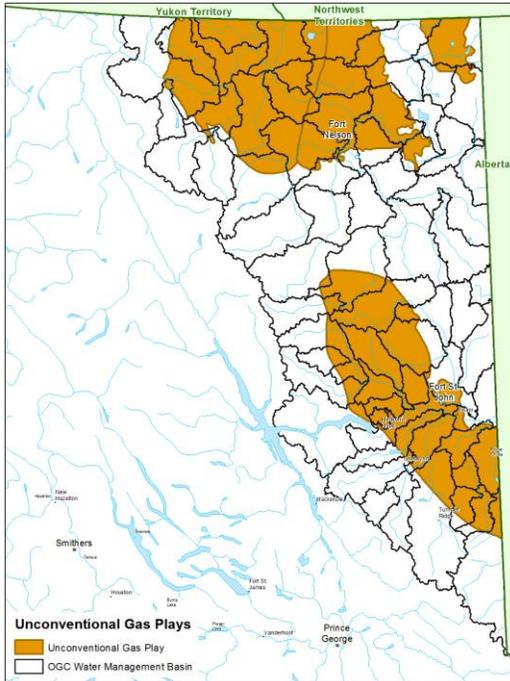


Sensitivities – aquatic ecosystem sensitivity - lake density per watershed

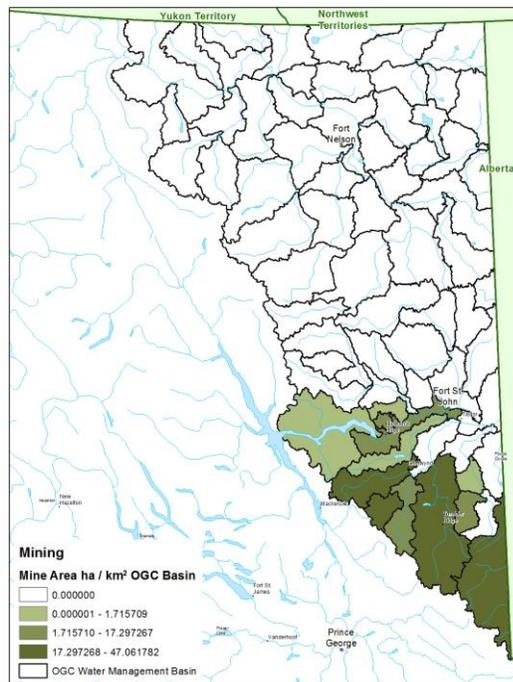
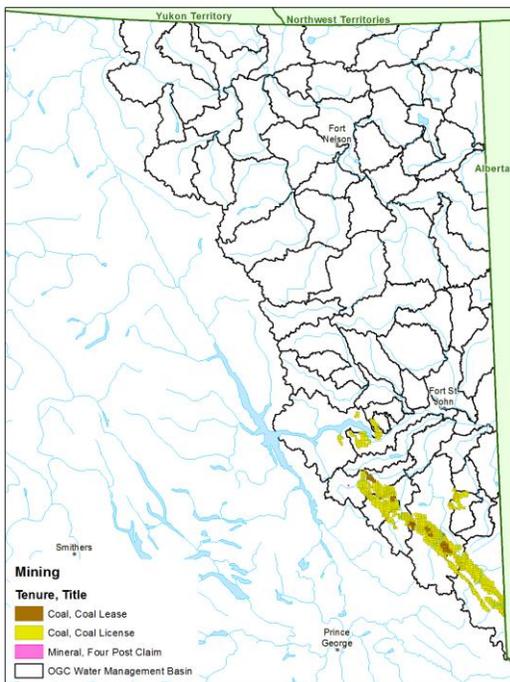


## Appendix B – Data Layers for Surface Water Quality

Future development – land tenure - oil and gas

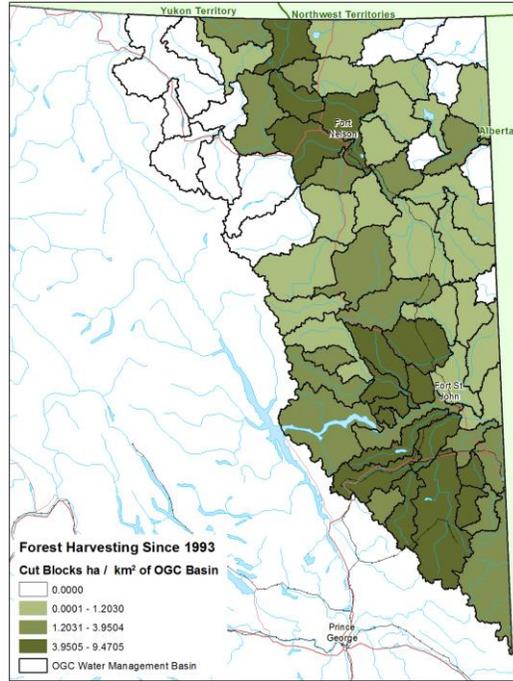
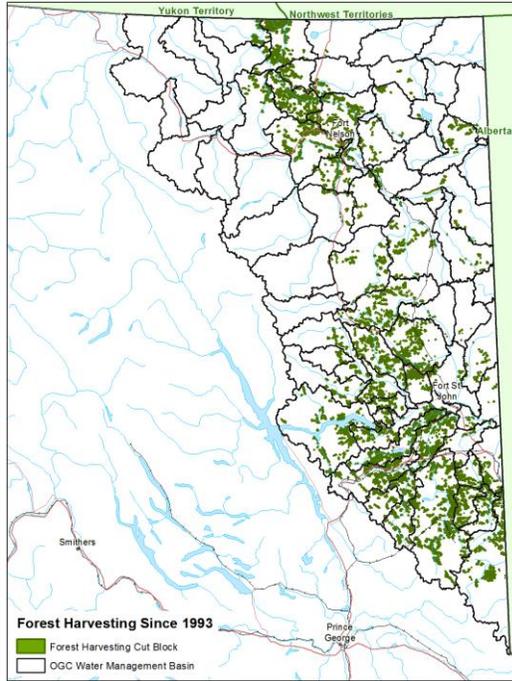


Future development – land tenure - mining

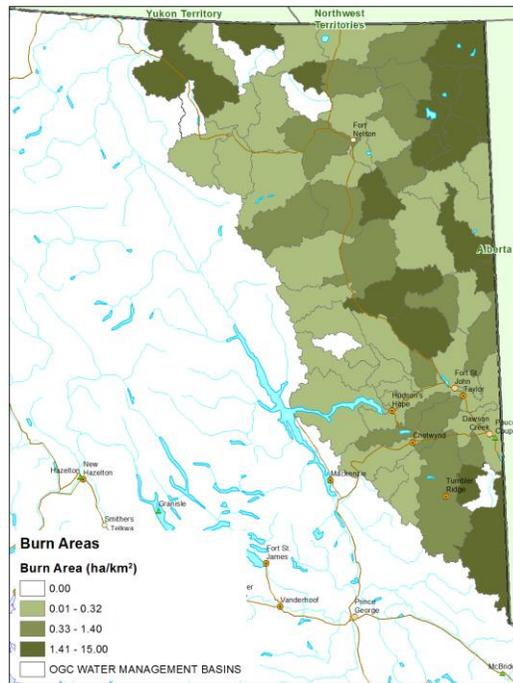
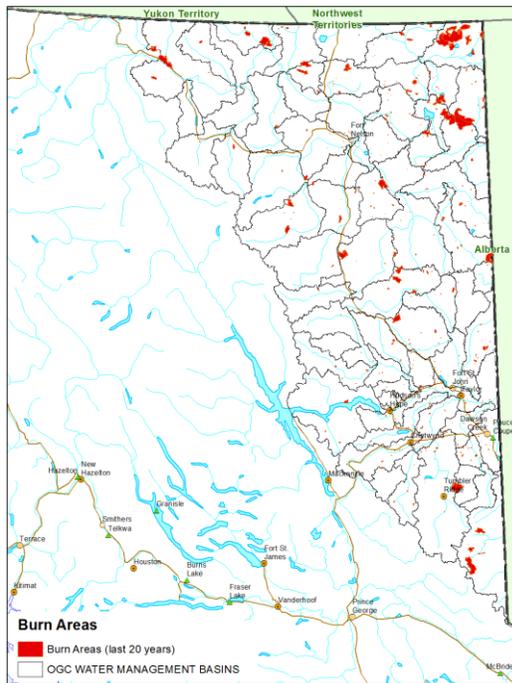




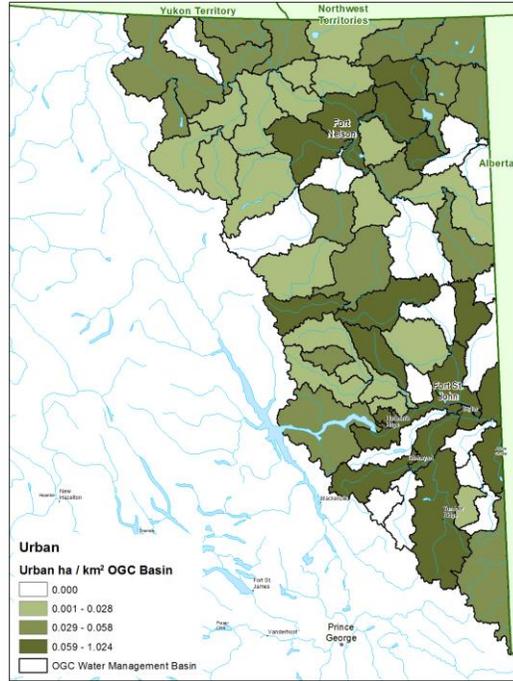
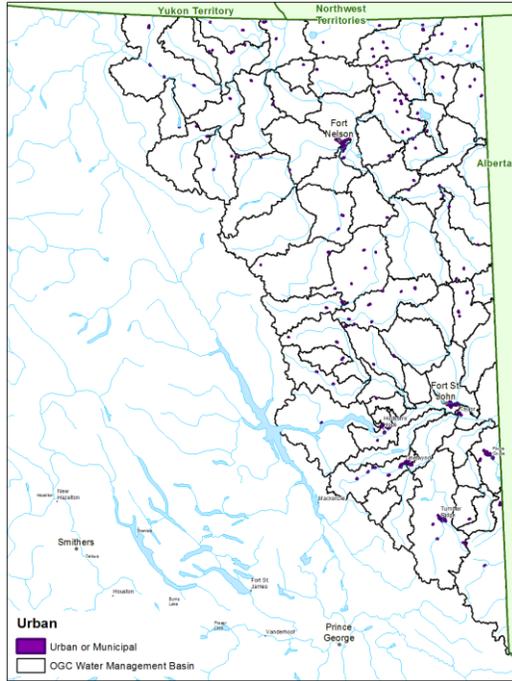
Current development – land disturbance – forestry clear cuts



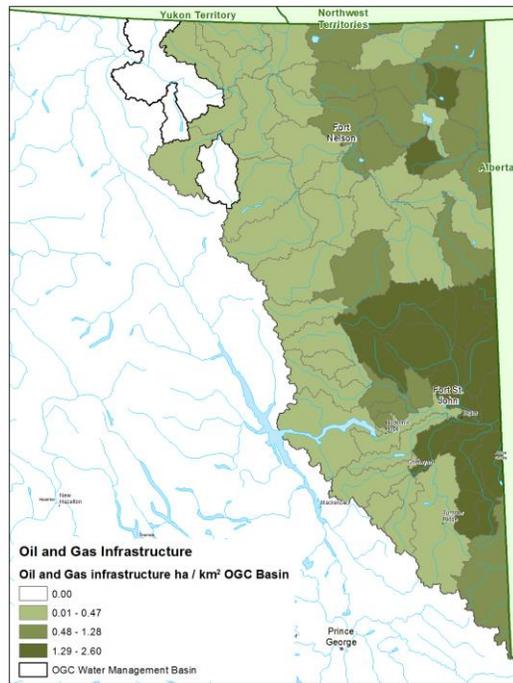
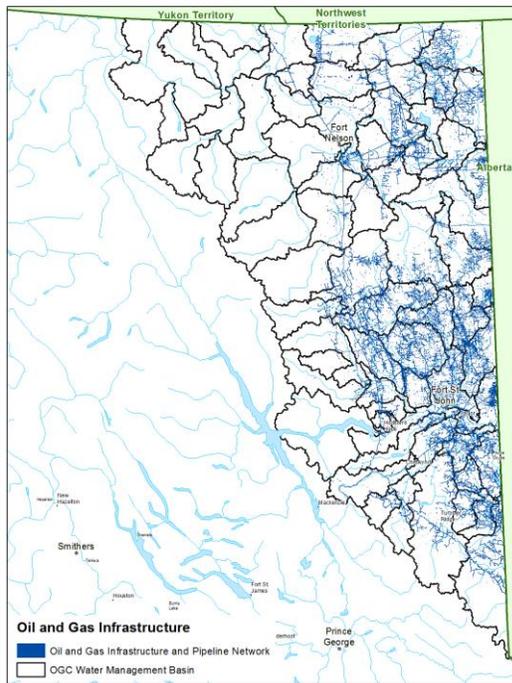
Current development – land disturbance – forestry burn areas



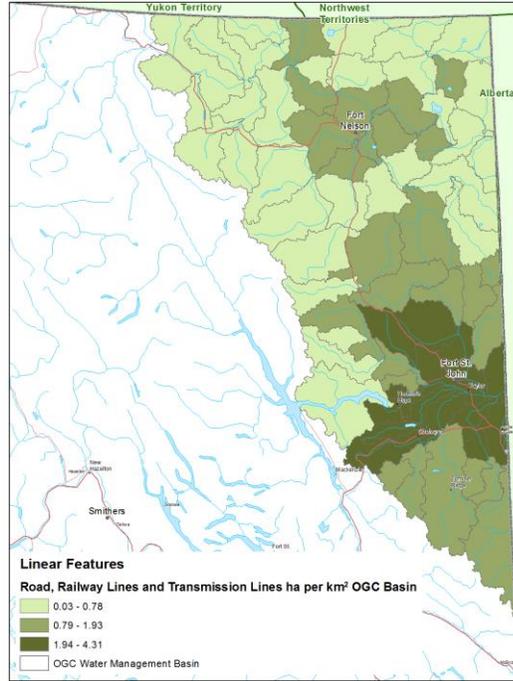
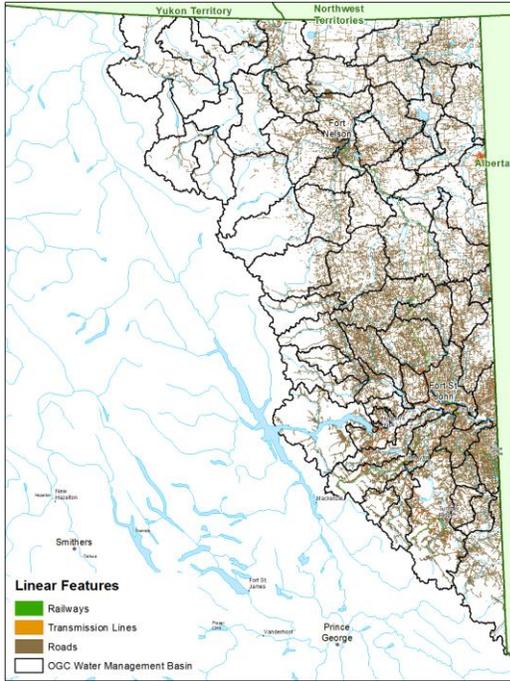
Current development – land disturbance – municipal/urban



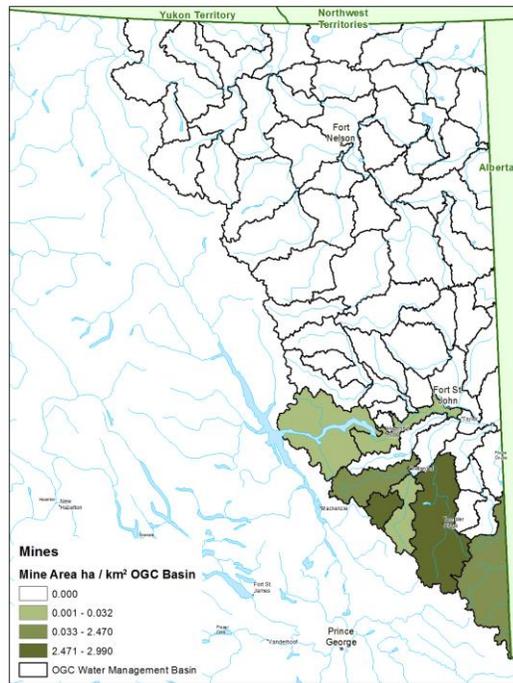
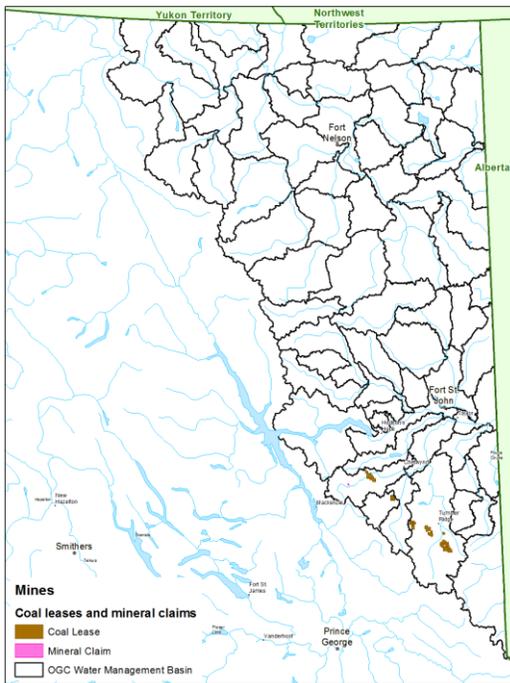
Current development – land disturbance - oil and gas infrastructure



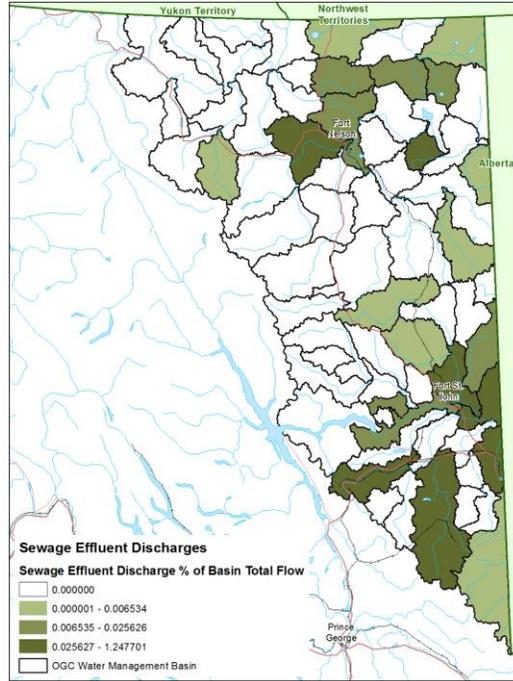
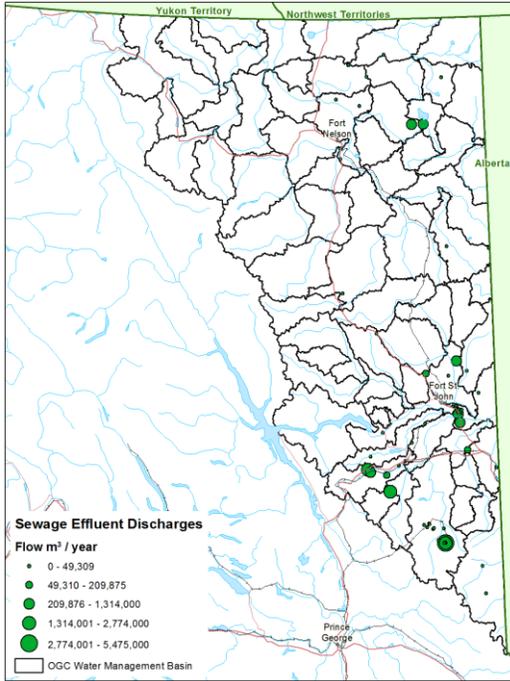
Current development – land disturbance – linear projects



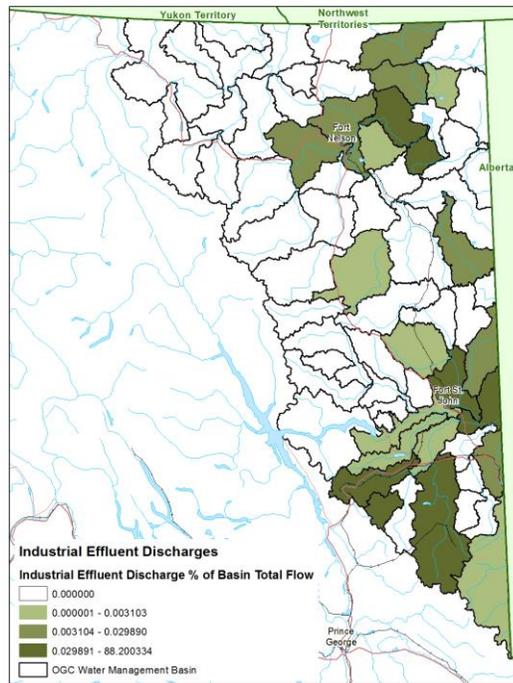
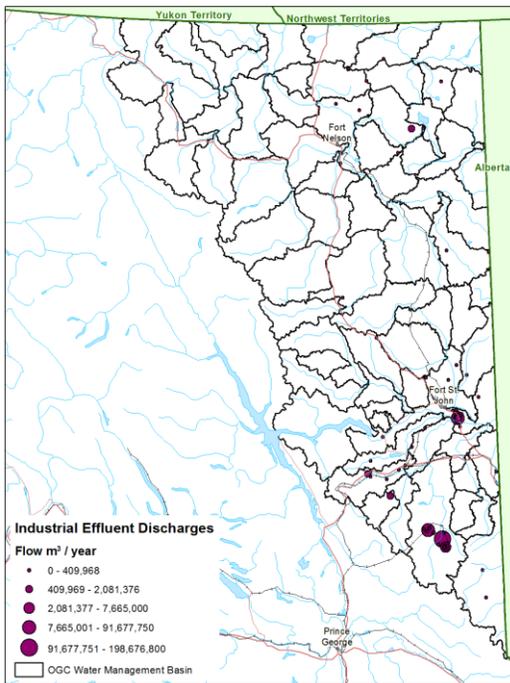
Current development – land disturbance - mining



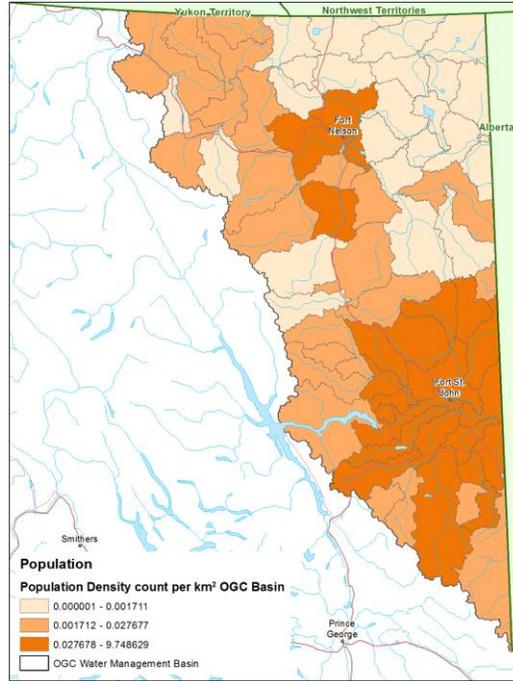
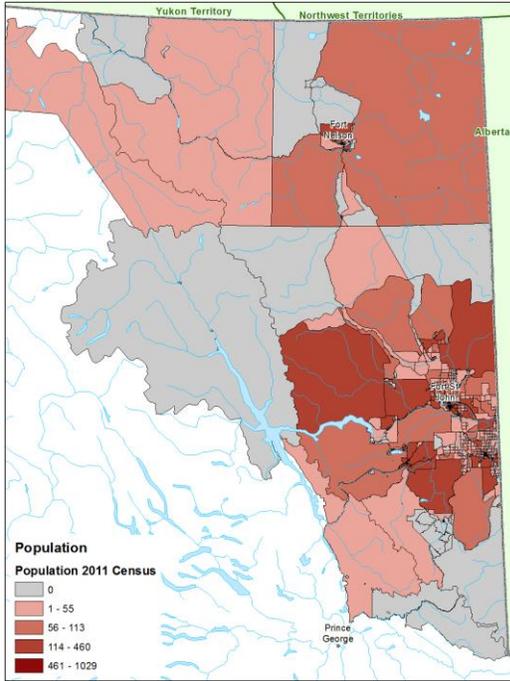
Current development – waste discharge permits - sewage



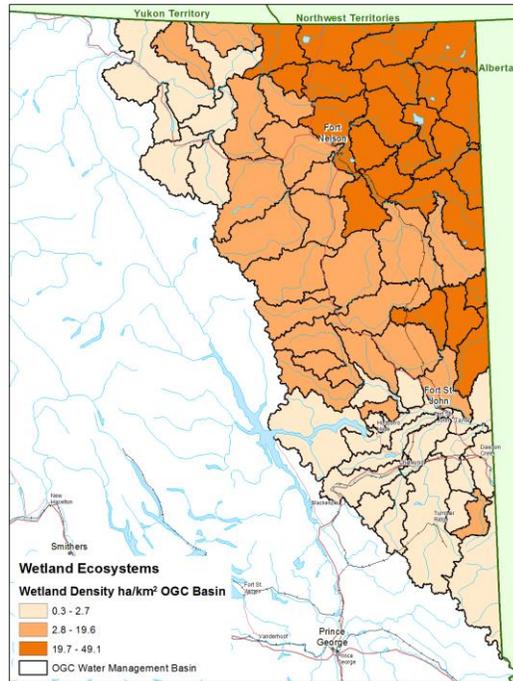
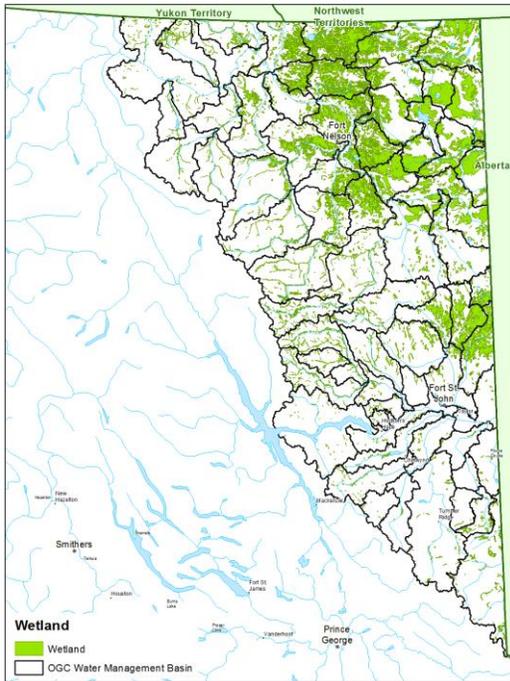
Current development – waste discharge permits – industrial



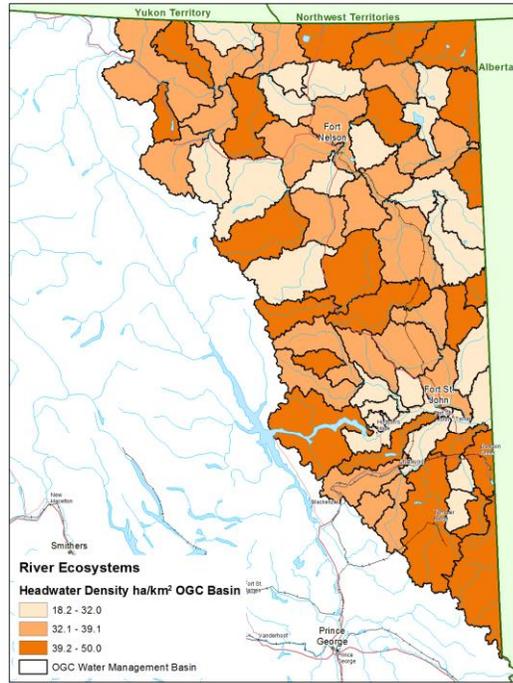
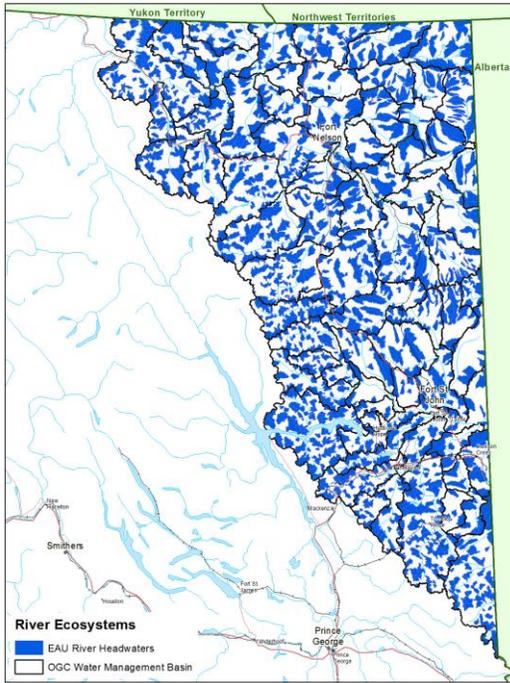
Sensitivities – rural and domestic water use - Population



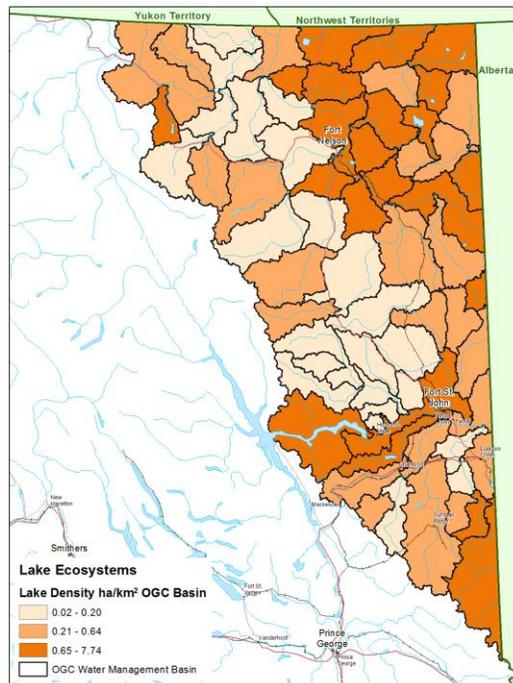
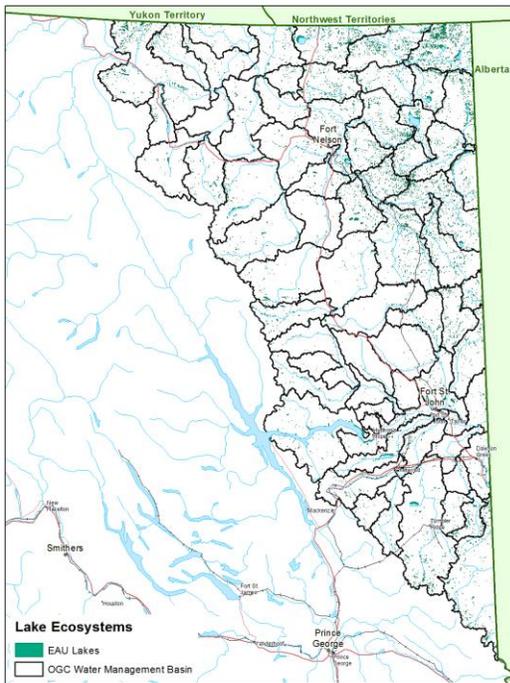
Sensitivities – aquatic ecosystem sensitivity - wetland density per watershed



Sensitivities – aquatic ecosystem sensitivity - river headwater density per watershed

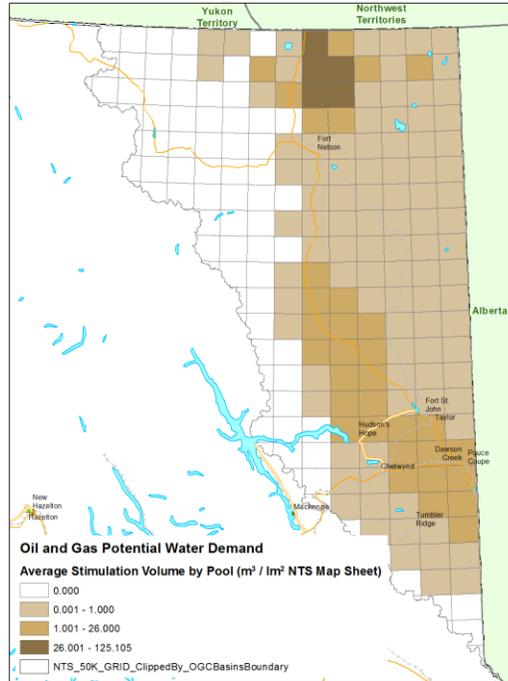
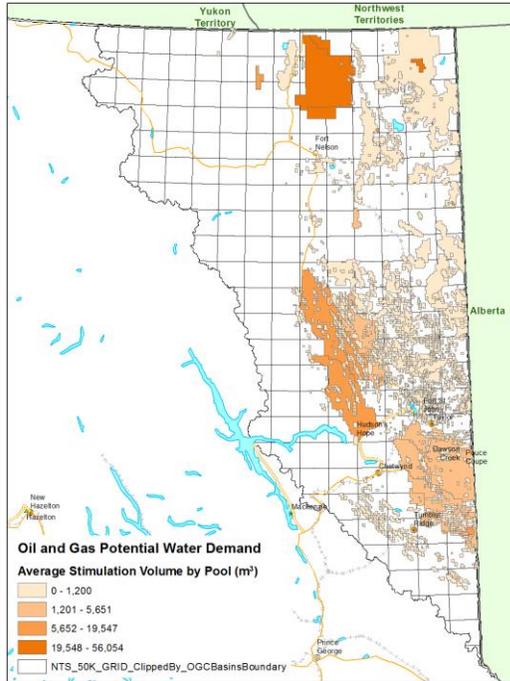


Sensitivities – aquatic ecosystem sensitivity - lake density per watershed

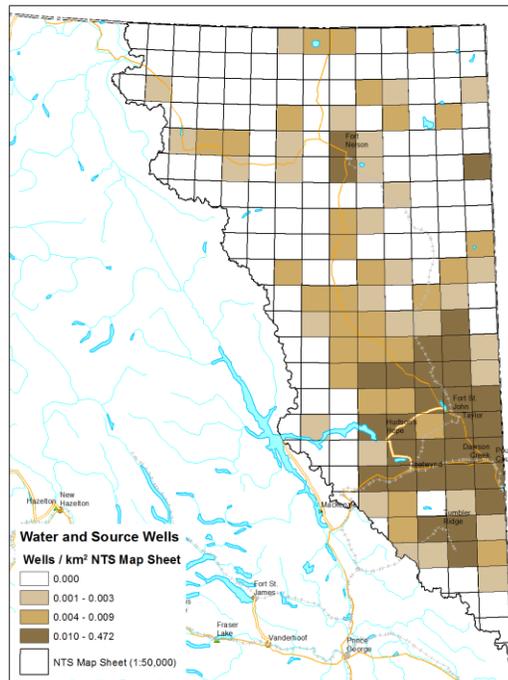
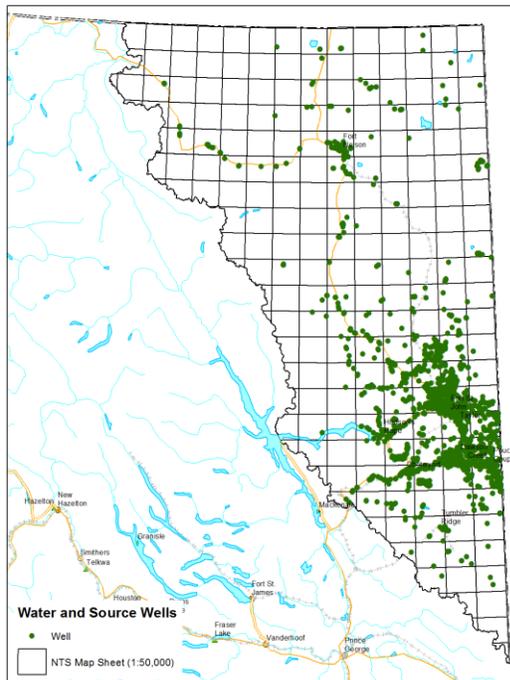


## Appendix C – Data Layers for Groundwater Demand

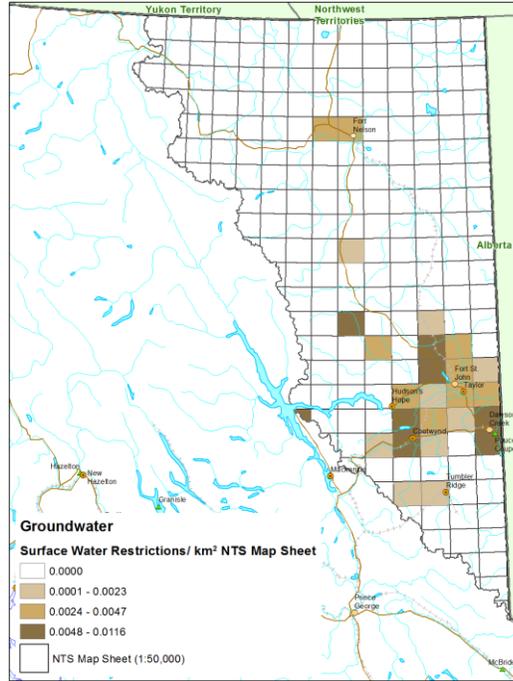
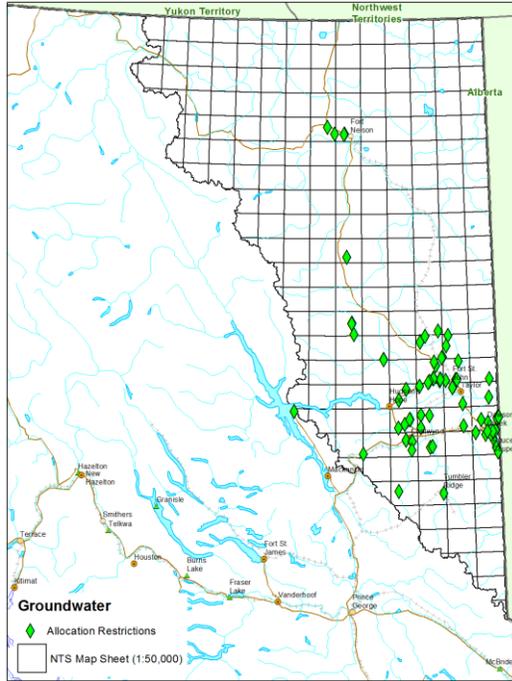
Future demand – potential water use in oil and gas



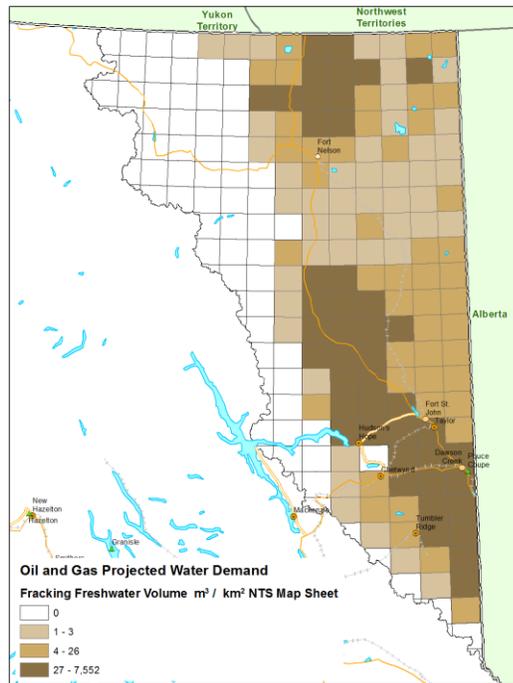
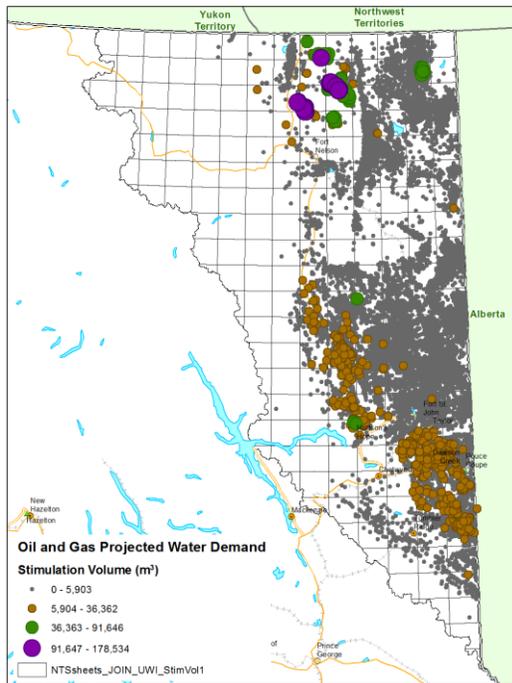
Current demand – density of water wells and source wells



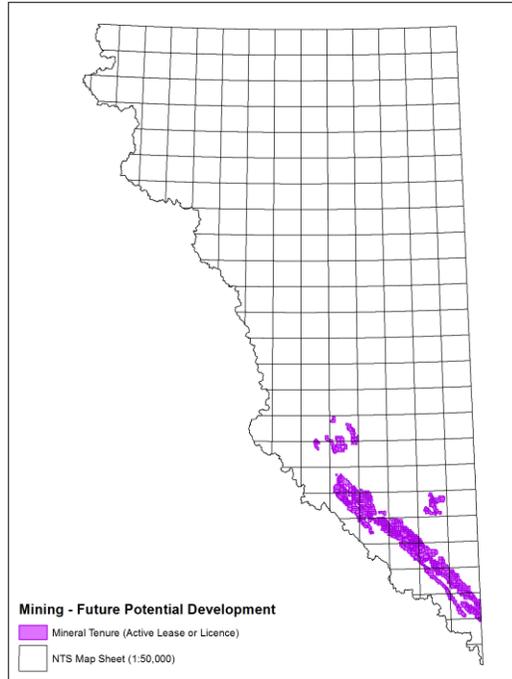
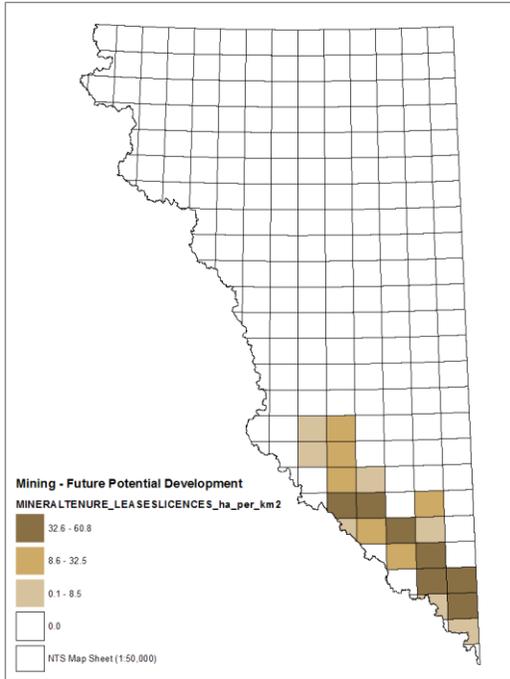
Current demand – surface water restrictions



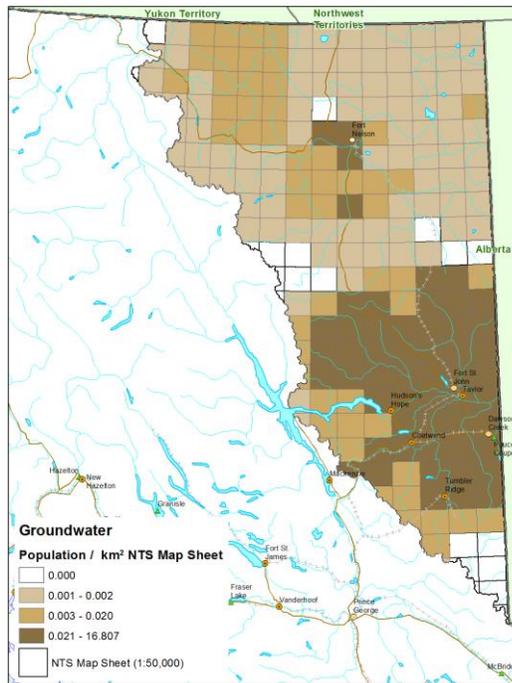
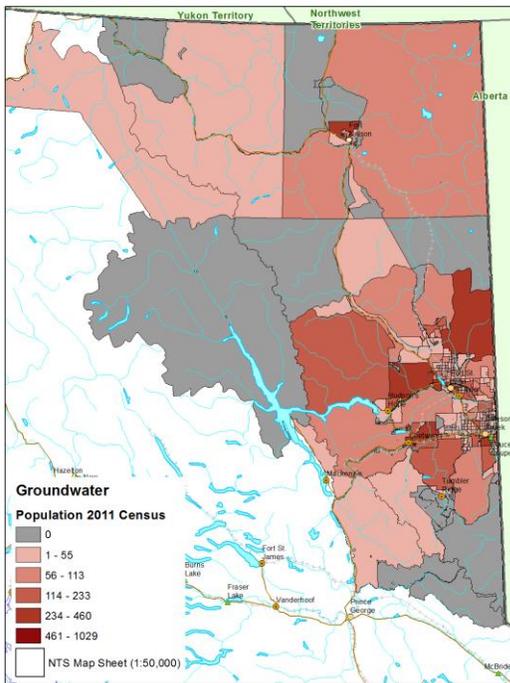
Current demand – water used for hydraulic fracturing in oil and gas



Current demand – mining tenure

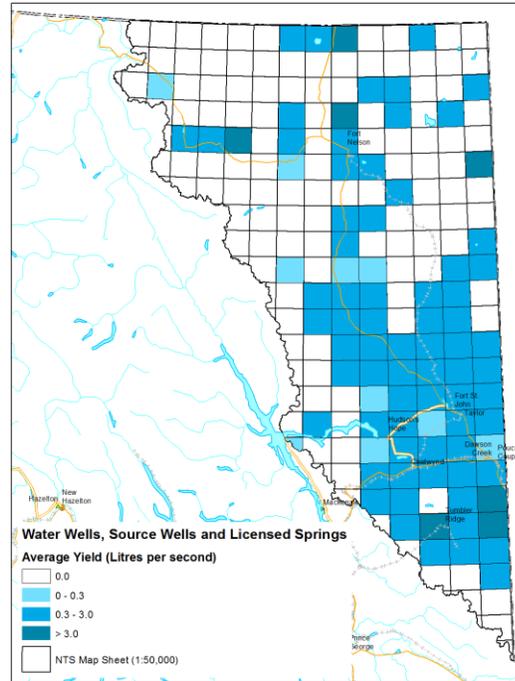
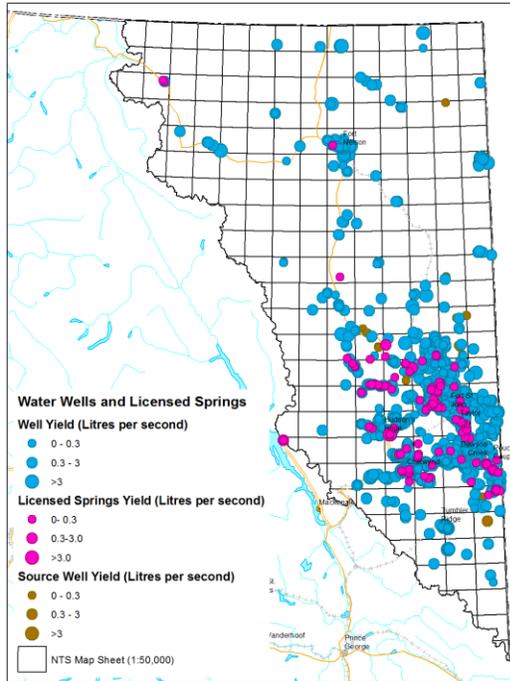


Current demand – population

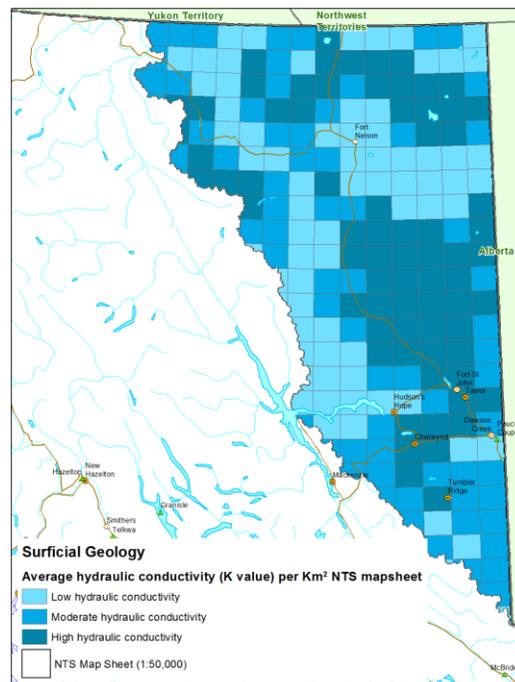
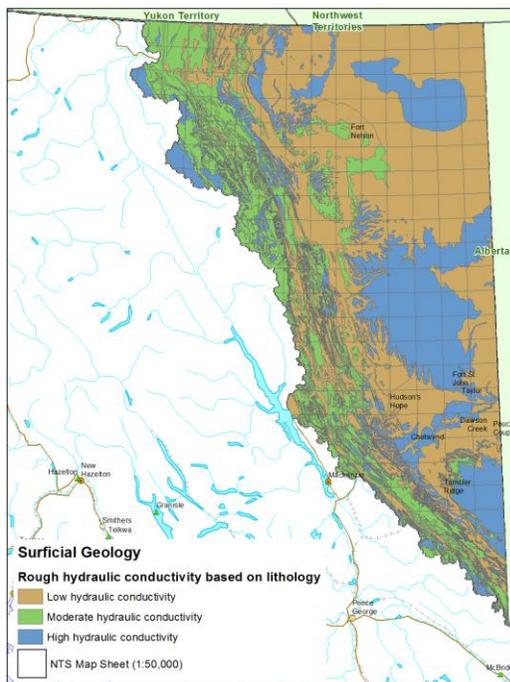


## Appendix D- Data Layers for Characterization of Regional Supply

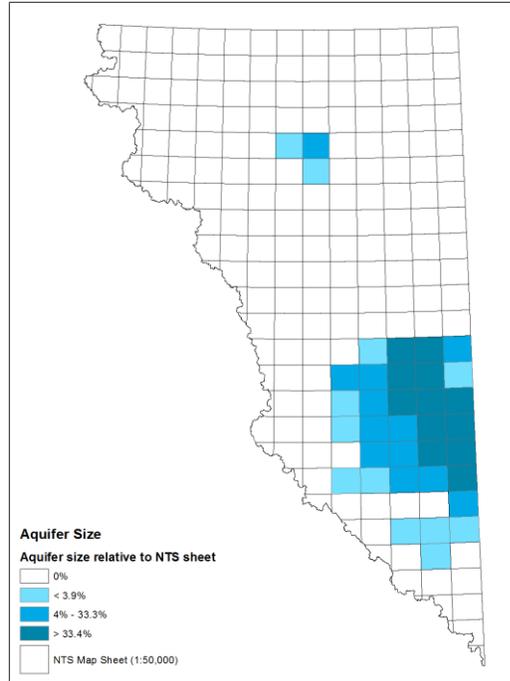
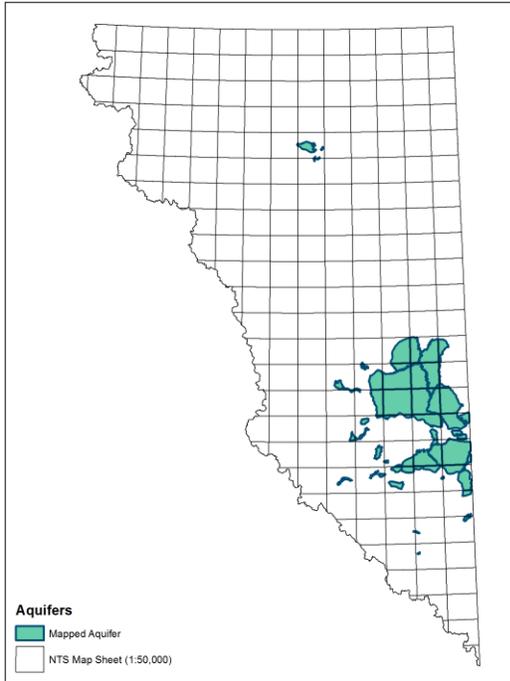
Supply – development indications – yield from water wells, source wells and springs



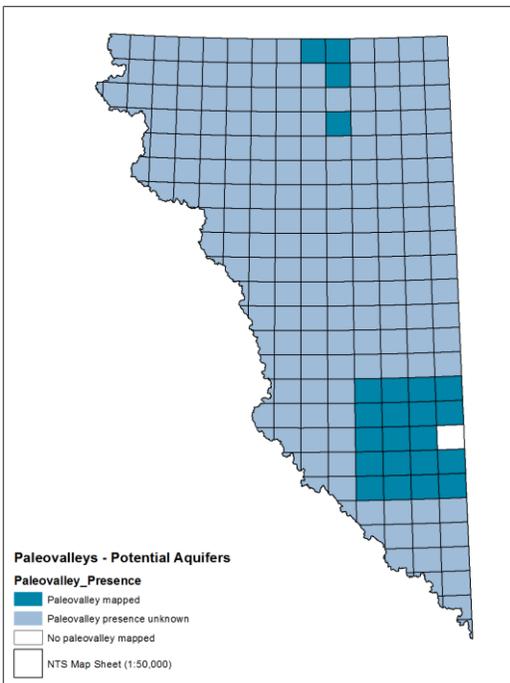
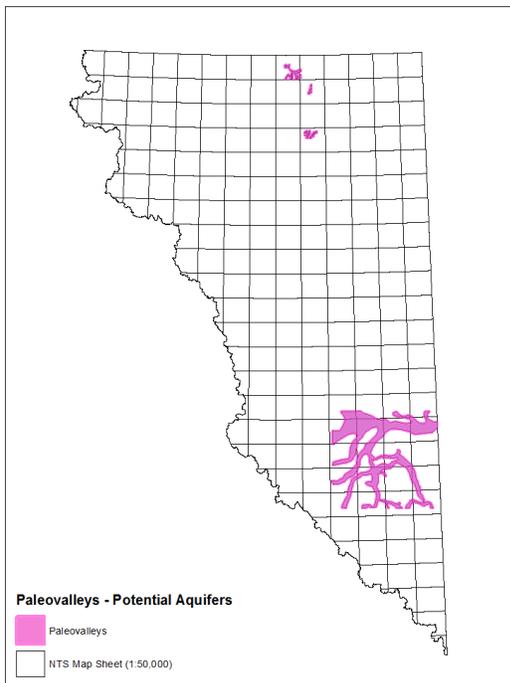
## Supply – natural resource indications – surficial geology



Supply – natural resource indications – aquifer size

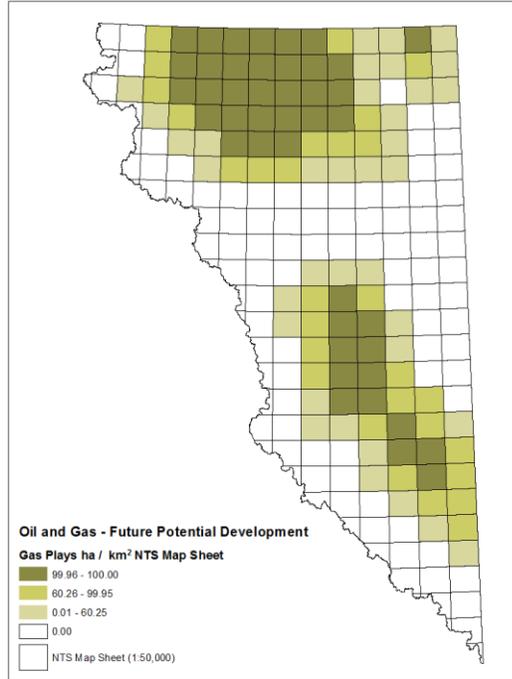
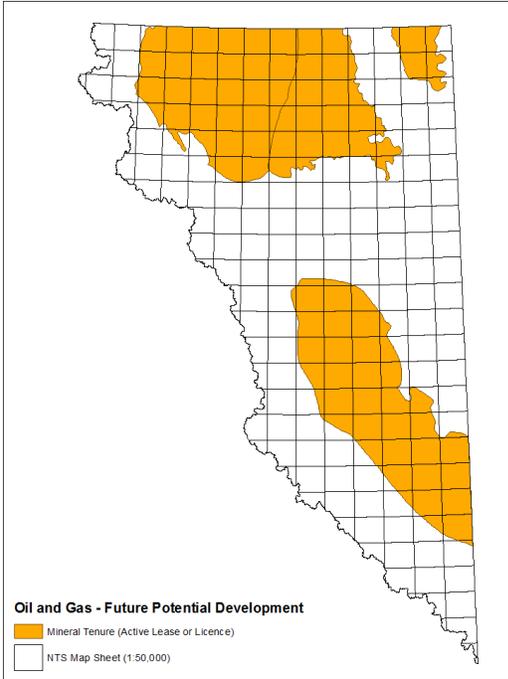


Supply – natural resource indications – paleovalleys

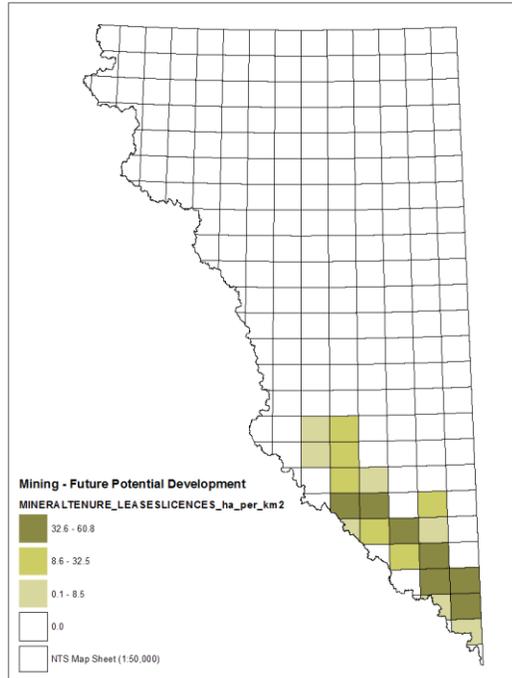
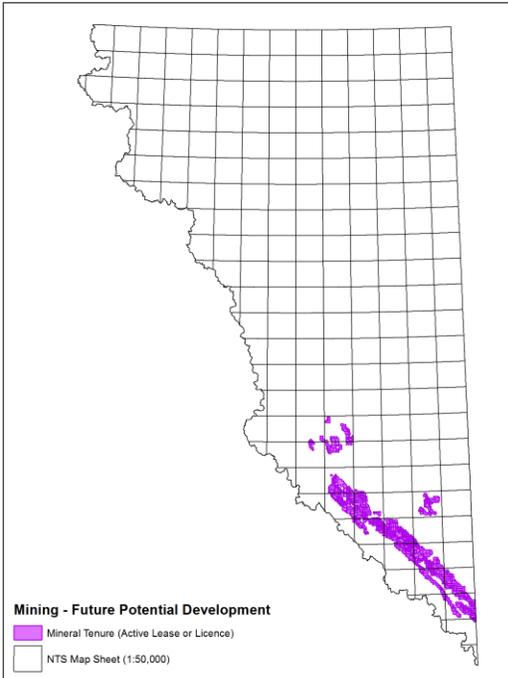


# Appendix E- Data Layers for Groundwater Quality

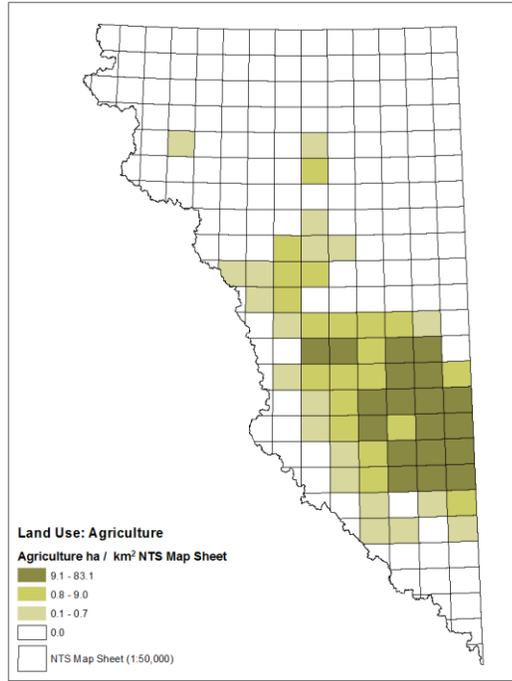
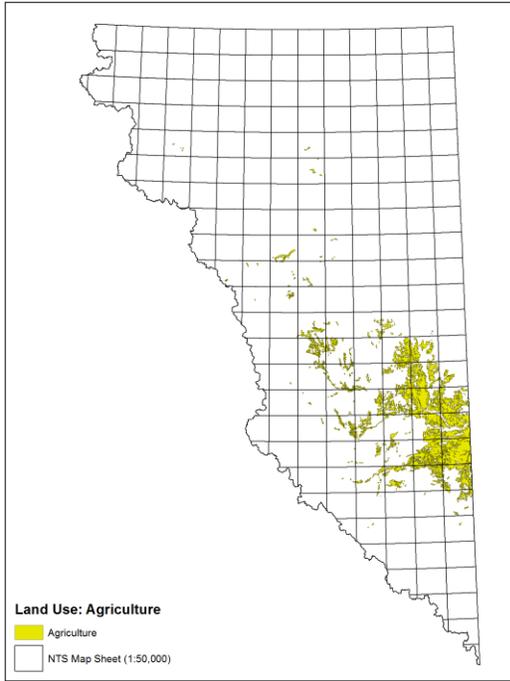
## Future development – unconventional gas play



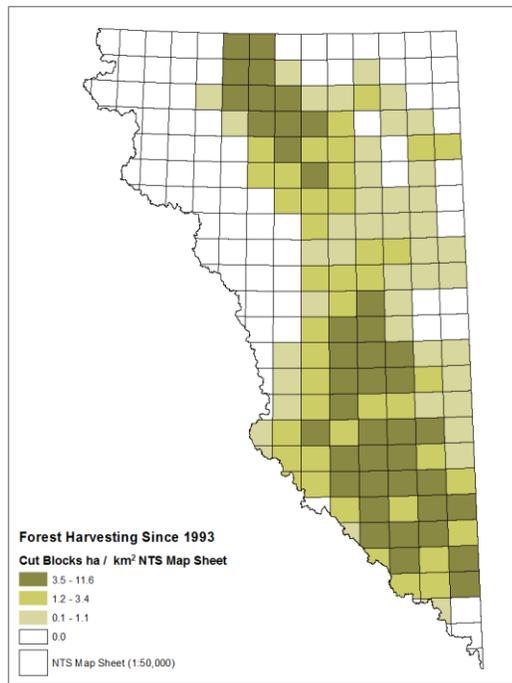
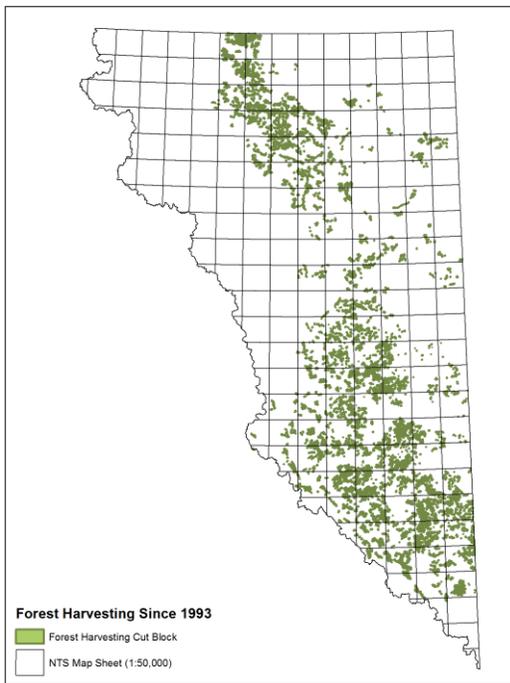
## Future development – mining tenure



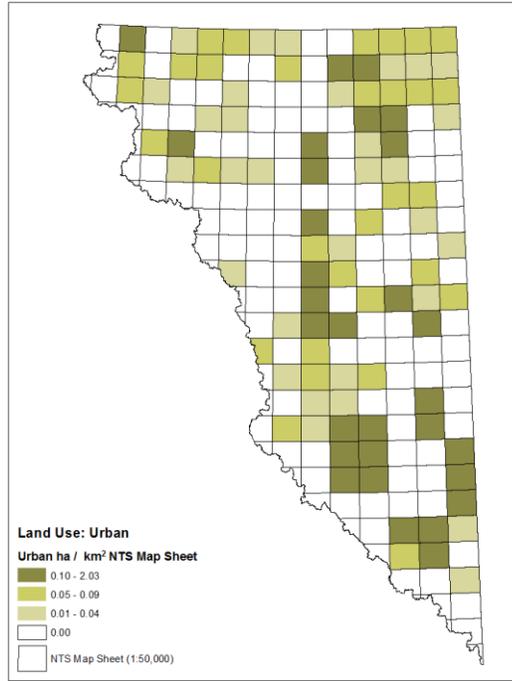
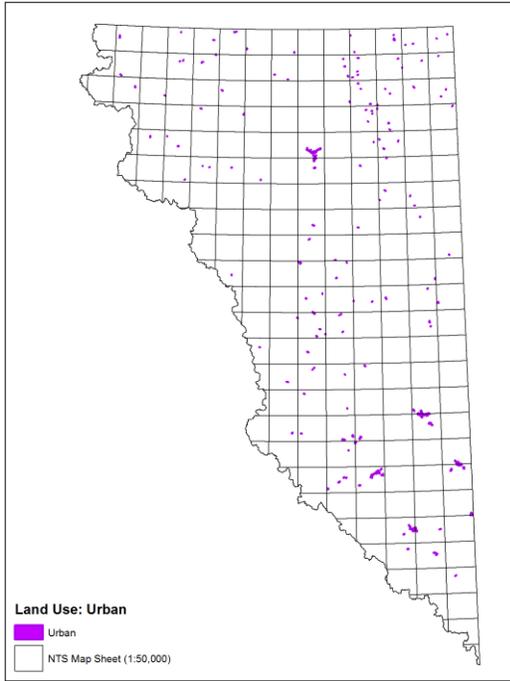
### Current disturbance – agriculture



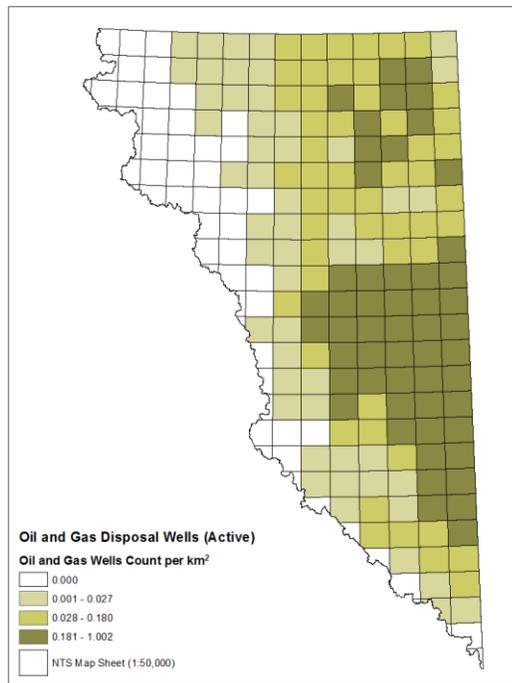
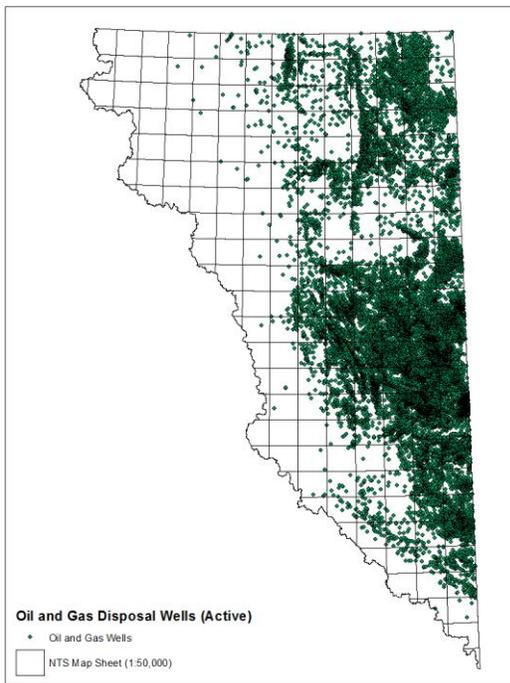
### Current disturbance – forest clear cuts



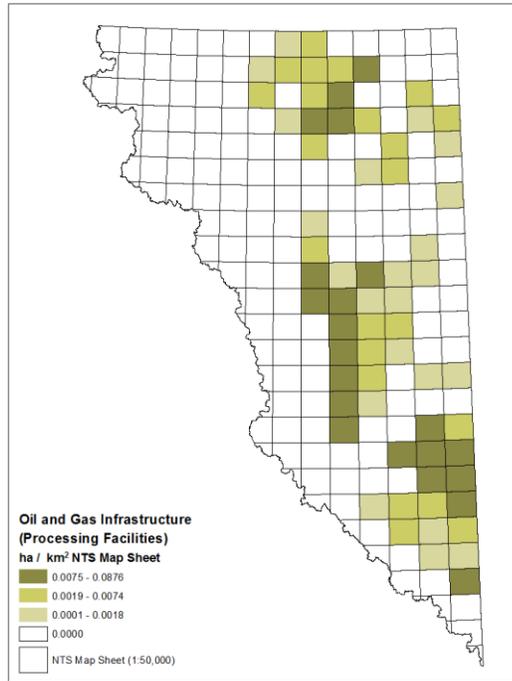
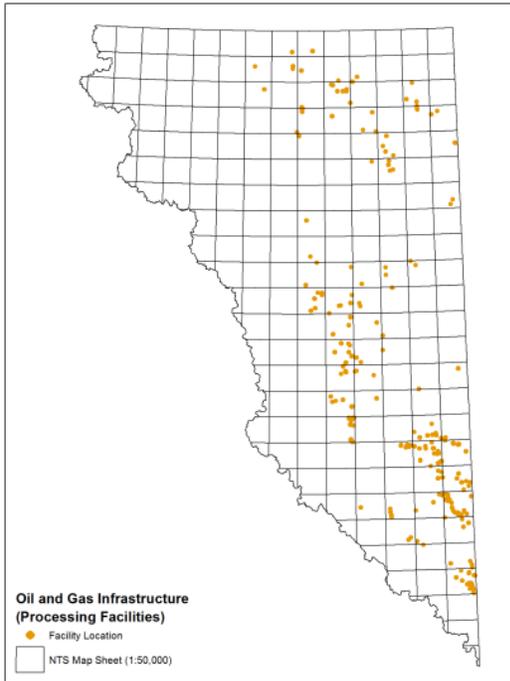
Current disturbance – urban development



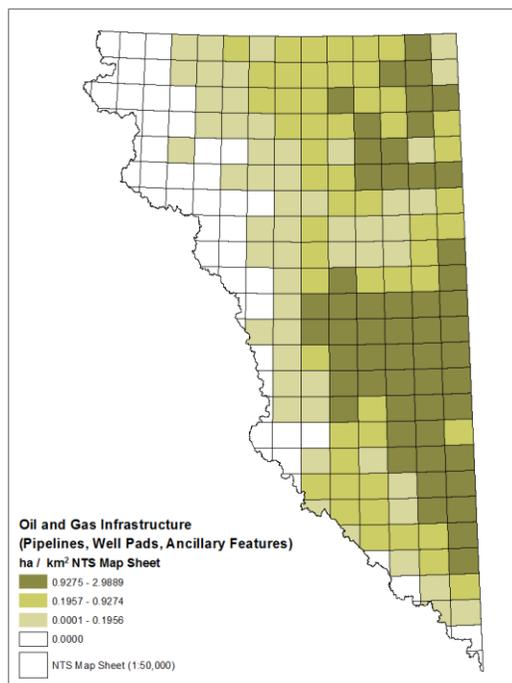
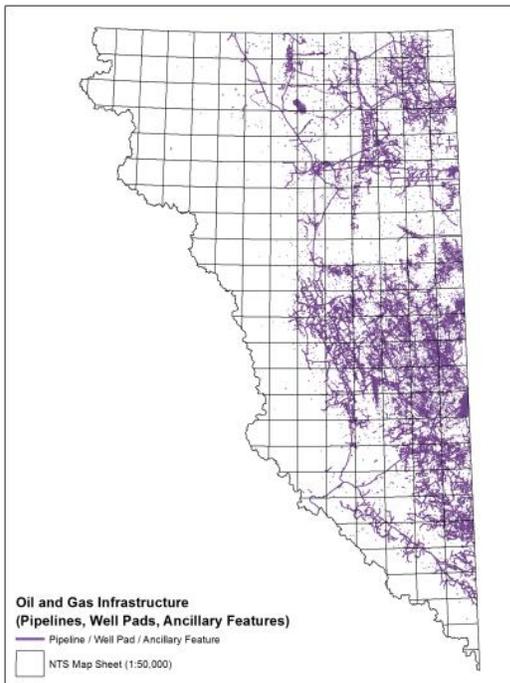
Current disturbance – oil and gas wells



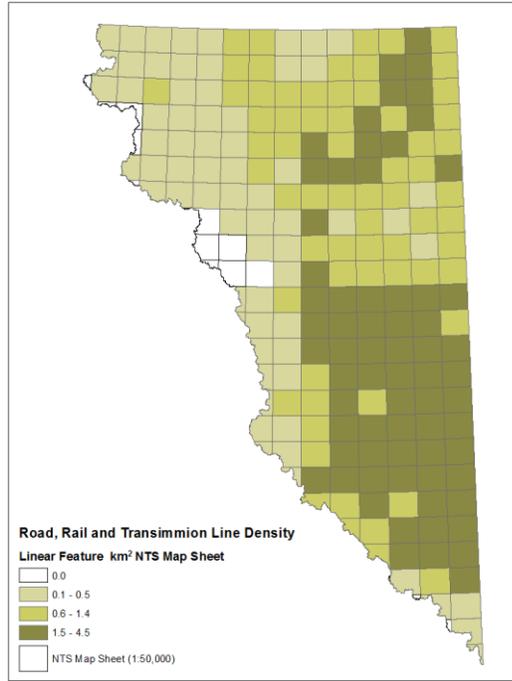
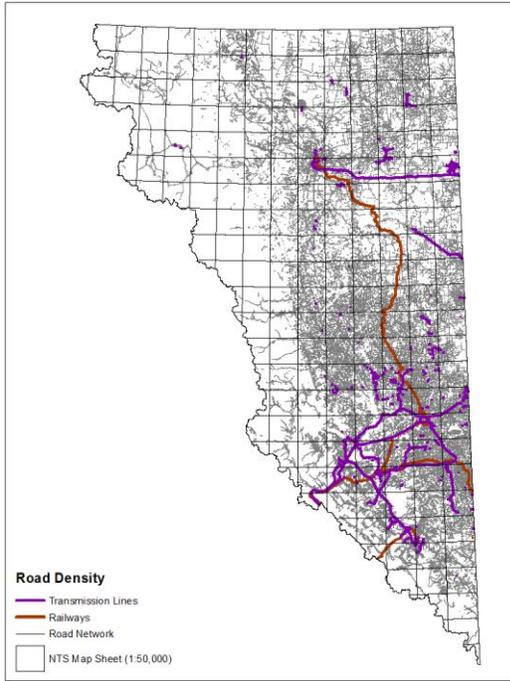
### Current disturbance – oil and gas facilities



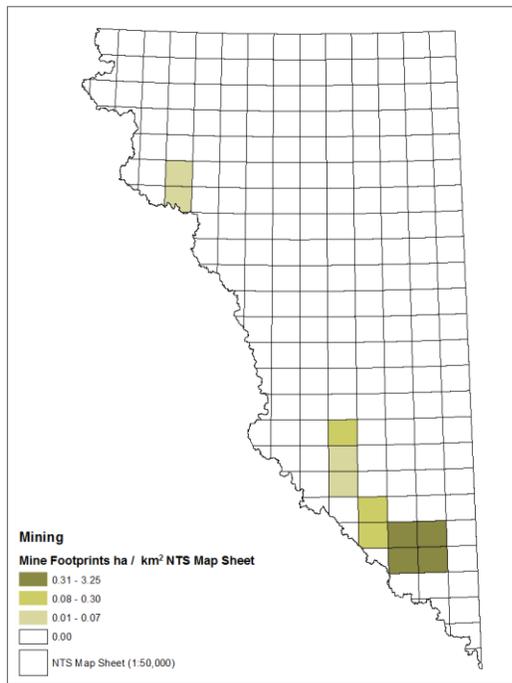
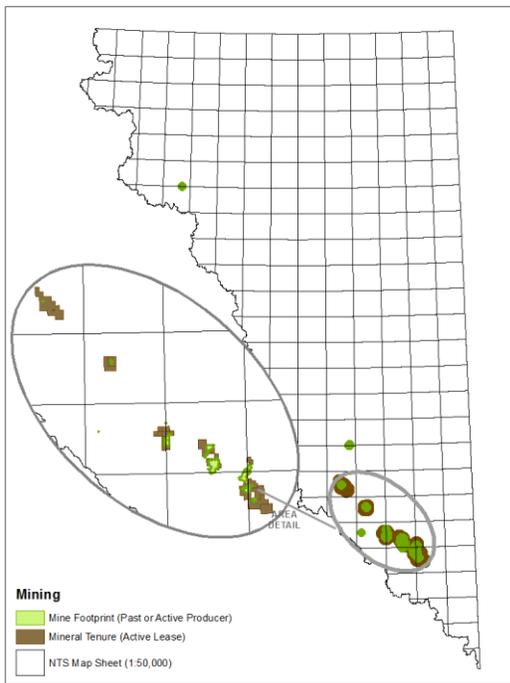
### Current disturbance – oil and gas pipelines



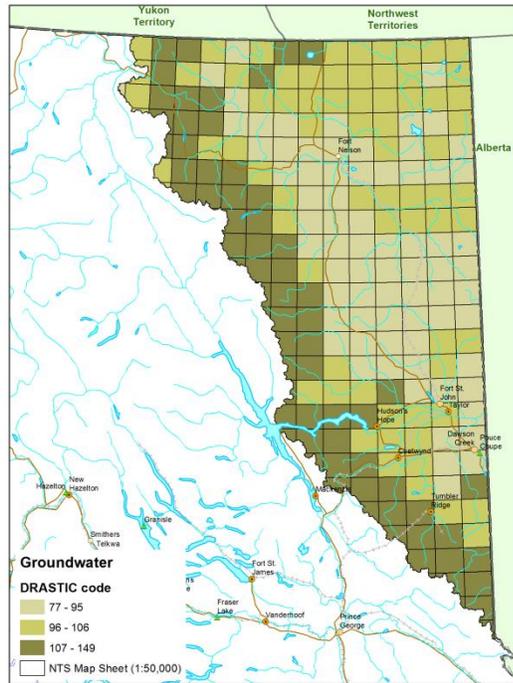
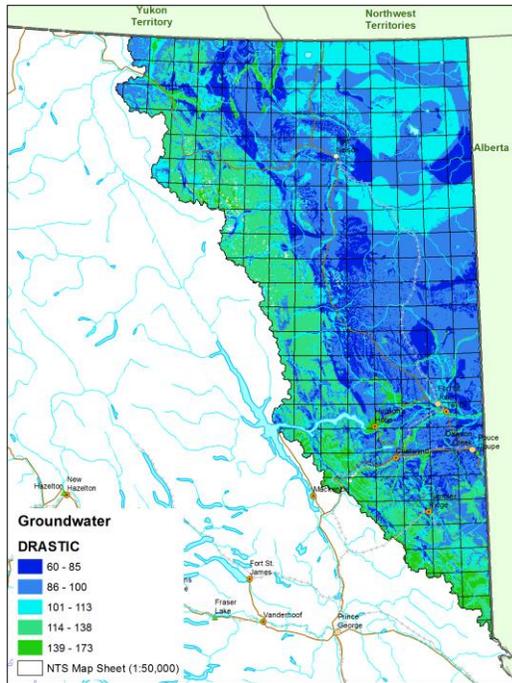
Current disturbance – transmission lines, roads, and rail lines



Current disturbance – active mines



# Sensitivities – potential groundwater vulnerability to contamination – DRASTIC



## Appendix F – Disturbance Sensitivity Results and Watershed Rankings for Surface Water Quantity

Water Management Basin	Water Quantity Disturbance and Sensitivity	Rank of Watershed by Quantity
<b>Pouce Coupe River</b>	2.73	1
<b>Lower Pine River</b>	2.63	2
<b>Cache Creek</b>	2.58	3
<b>Lower Beatton River</b>	2.54	4
<b>Lower Kiskatinaw River</b>	2.53	5
<b>Murray River</b>	2.39	6
<b>Lower Halfway River</b>	2.39	7
<b>Blueberry River</b>	2.38	8
<b>Lower Peace River</b>	2.36	9
<b>East Kiskatinaw River</b>	2.34	10
<b>Middle Fort Nelson River</b>	2.3	11
<b>Lower Muskwa River</b>	2.21	12
<b>Lynx Creek</b>	2.21	13
<b>Cameron River</b>	2.19	14
<b>Middle Kiskatinaw River</b>	2.12	15
<b>Doig River</b>	2.04	16
<b>Upper Peace River</b>	1.94	17
<b>Moberly River</b>	1.92	18
<b>Kiwigana River</b>	1.91	19.5
<b>Tsea River</b>	1.91	19.5
<b>Upper Halfway</b>	1.87	21
<b>Upper Pine River</b>	1.87	22
<b>Farrell Creek</b>	1.82	23
<b>Milligan Creek</b>	1.75	24
<b>Upper Beatton River</b>	1.74	25
<b>Middle Sikanni Chief River</b>	1.73	26
<b>Capot-Blanc River</b>	1.71	27
<b>Chinchaga River</b>	1.69	28
<b>Sahdoanah River</b>	1.67	29
<b>Lower Petitot River</b>	1.66	30.5
<b>Sahtaneh River</b>	1.66	30.5
<b>West Kiskatinaw River</b>	1.64	32
<b>Hay River</b>	1.54	33

Graham River	1.53	34
Fontas River	1.47	35.5
Middle Beaton River	1.47	35.5
Kyklo River	1.44	38
Lower Liard River	1.44	38
Upper Sikanni Chief River	1.44	38
Smoky River	1.36	40
Snake River	1.32	41
Middle Petitot River	1.31	42
Dunedin River	1.3	43
Klua River	1.29	44
Sukunka River	1.24	45
Kahntah River	1.22	46
Middle Prophet River	1.21	47
Upper Petitot River	1.19	48
Burnt River	1.14	49.5
Upper Fort Nelson River	1.14	49.5
Lower Prophet River	1.11	51
Upper Prophet River	1.07	52
Lower Fort Nelson River	1.05	53
Shekilie River	1.02	54
Upper Kotcho River	0.97	55
Lower Kotcho River	0.97	56
Lower Sikanni Chief River	0.92	57
Middle Muskwa River	0.9	58
Chowade River	0.87	59
Peace Arm	0.73	60
Grayling River	0.65	61
Upper Muskwa River	0.64	62
Beaver River	0.62	63
Middle Liard River	0.62	64
Upper Liard River	0.55	65
Upper Toad River	0.54	66
Muncho River	0.5	67
Lower Toad River	0.5	68
Racing River	0.39	69

## Appendix G – Disturbance Sensitivity Results and Watershed Rankings for Surface Water Quality

Water Management Basin	Water Quality Disturbance and Sensitivity	Rank of Watershed by Vulnerability
<b>Murray River</b>	2.3875	1
<b>Pouce Coupe River</b>	2.3225	2
<b>Upper Peace River</b>	2.285	3
<b>Upper Pine River</b>	2.135	4
<b>Middle Fort Nelson River</b>	2.1325	5
<b>Blueberry River</b>	2.0925	6
<b>Farrell Creek</b>	2	7
<b>Lower Beatton River</b>	1.9875	8
<b>Lower Pine River</b>	1.9575	9
<b>Lower Peace River</b>	1.9475	10
<b>Cameron River</b>	1.8725	11
<b>Lynx Creek</b>	1.83	12
<b>Lower Muskwa River</b>	1.8225	13
<b>Moberly River</b>	1.815	14
<b>Smoky River</b>	1.8	15
<b>Kyklo River</b>	1.73	16
<b>Doig River</b>	1.7175	17
<b>Middle Kiskatinaw River</b>	1.715	18
<b>Upper Beatton River</b>	1.68	19
<b>East Kiskatinaw River</b>	1.655	20
<b>Lower Kiskatinaw River</b>	1.635	21
<b>Cache Creek</b>	1.62	22
<b>Lower Halfway River</b>	1.61	23
<b>Milligan Creek</b>	1.5925	24
<b>West Kiskatinaw River</b>	1.5775	25
<b>Middle Beatton River</b>	1.535	26
<b>Tsea River</b>	1.5	27
<b>Middle Sikanni Chief River</b>	1.48	28
<b>Sahtaneh River</b>	1.465	29
<b>Kiwigana River</b>	1.455	30
<b>Sahdoanah River</b>	1.445	31
<b>Burnt River</b>	1.415	32
<b>Upper Petitot River</b>	1.4	33

Lower Petitot River	1.37	34
Snake River	1.355	35
Lower Liard River	1.345	36
Upper Fort Nelson River	1.3125	37
Middle Petitot River	1.3	38
Sukunka River	1.2875	39
Middle Prophet River	1.2825	40
Kahntah River	1.2575	41
Beaver River	1.255	42
Peace Arm	1.25	43
Chinchaga River	1.23	44
Dunedin River	1.22	45
Hay River	1.22	46
Shekilie River	1.2125	47.5
Upper Halfway	1.2125	47.5
Chowade River	1.2025	49
Upper Kotcho River	1.185	50
Klua River	1.1825	51
Upper Liard River	1.165	52
Lower Prophet River	1.15	53
Fontas River	1.145	54
Graham River	1.0725	55
Capot-Blanc River	1.0575	56
Lower Kotcho River	1.045	57
Lower Fort Nelson River	1.035	58
Middle Liard River	1.0175	59
Upper Sikanni Chief River	1.0075	60
Grayling River	0.9875	61
Upper Muskwa River	0.94	62
Upper Prophet River	0.8825	63
Middle Muskwa River	0.8825	64
Lower Sikanni Chief River	0.88	65
Upper Toad River	0.8575	66
Lower Toad River	0.8375	67
Racing River	0.7825	68
Muncho River	0.72	69

## Appendix H – Disturbance Sensitivity Results and Map Sheet Rankings for Groundwater Demand and Potential Productivity

Map Sheet	Potential Productivity	Rank of Potential Productivity	Groundwater Demand	Rank of Groundwater Demand	Rank of Potential Productivity + Groundwater Demand
093P09	2.45	3	2.05	6.5	1
094A06	2.15	14.5	2.15	3	2.5
094A07	2.15	14.5	2.15	3	2.5
094A04	2.3	9	1.8	15.5	4
094A01	2.15	14.5	1.9	11	5.5
094J15	2.15	14.5	1.9	11	5.5
094A11	2	23.5	2.15	3	7
094A08	2.3	9	1.65	20.5	8
093P03	2.1	18	1.85	13	9
093P13	2	23.5	2	8	10
094A02	2.15	14.5	1.75	18	11
093P08	2.7	1	1.3	32	12
094A10	2	23.5	1.9	11	13
093P15	2.15	14.5	1.55	23.5	14
093P11	2	23.5	1.8	15.5	15.5
093P14	2	23.5	1.8	15.5	15.5
093P10	2.3	9	1.3	32	17
093P12	1.85	42	2.3	1	18
093O09	1.85	35	1.95	9	19.5
094A14	2	23.5	1.65	20.5	19.5
094B01	2	23.5	1.6	22	21
094I09	2.4	5.5	1.1	41	22
094B09	1.85	35	1.8	15.5	23
094A15	2	23.5	1.4	28	24.5
094J10	2	23.5	1.4	28	24.5
093I15	1.85	35	1.7	19	26
094B15	1.7	49.5	2.1	5	27
094A05	2.15	11	1.05	45.5	28
093P02	1.85	35	1.55	25	29
094A12	1.85	35	1.3	32	30.5
094O15	2.55	2	0.8	65	30.5
094K15	2.4	5.5	0.8	65	32

093P04	1.7	49.5	1.55	23.5	33
094B10	1.85	35	1.15	38.5	34
093P01	2.4	5.5	0.8	70	35
093P07	1.85	35	1.1	42	36
094A16	2	23.5	0.9	54	37
093O08	1.7	49.5	1.35	30	38
093P05	1.7	57.5	1.45	26	39
093I16	1.7	49.5	1.15	36	40.5
093P16	1.45	79	2.05	6.5	40.5
094J02	1.7	49.5	1.15	38.5	42
094A09	1.85	35	0.9	54	43
094A03	1.6	59	1.25	34	44
094H02	1.55	69	1.4	28	45
094K14	1.85	35	0.8	65	46
094A13	1.7	57.5	1.05	45.5	47
093I14	1.85	35	0.8	70	48.5
094O02	2.4	5.5	0.5	99.5	48.5
094H06	1.55	69	1.15	38.5	50
094P14	1.7	49.5	0.85	59	51
094I05	1.85	35	0.75	74.5	52.5
094J09	1.85	35	0.75	74.5	52.5
094B16	1.55	69	1.05	45.5	55
094G01	1.55	69	1.05	45.5	55
094G02	1.55	69	1.05	45.5	55
094B03	1.85	35	0.7	83	57
093O16	1.15	83.5	1.2	35	59
094P02	1.55	69	1	49.5	59
094P04	1.55	69	1	49.5	59
094H03	1.55	69	0.9	54	61.5
094H07	1.55	69	0.9	54	61.5
094G03	1.7	49.5	0.75	74.5	63
094B08	1.3	80.5	1.05	45.5	64
094J14	0.9	89	1.15	38.5	65
094G15	1.55	69	0.85	59	67
094H16	1.55	69	0.85	59	67
094O14	1.55	69	0.85	59	67
093I09	1.7	49.5	0.75	79	69.5
094G07	1.7	49.5	0.75	79	69.5
094G06	1.7	49.5	0.7	81.5	71
094G08	1.55	69	0.8	65	73

094O04	1.55	69	0.8	65	73
094O08	1.55	69	0.8	65	73
093O13	1.15	83.5	0.9	54	75
094P08	1.7	49.5	0.6	89.5	76
094J01	1.55	69	0.75	74.5	77.5
094P05	1.55	69	0.75	74.5	77.5
094J13	1.7	49.5	0.55	95	79.5
094O13	1.7	49.5	0.55	95	79.5
094G09	1	86.5	0.85	59	81
094H10	1.55	69	0.7	81.5	82
094G10	1	86.5	0.8	70	83
094J12	1.15	83.5	0.55	95	84.5
094M08	1.15	83.5	0.55	95	84.5
094G12	1.3	80.5	0.5	99.5	86
094K13	1.7	49.5	0.4	136.5	87
094H09	1.55	69	0.45	122.5	88
094J16	0.75	117.5	0.75	74.5	89
093P06	0.75	117.5	0.65	85.5	90.5
094B07	0.75	117.5	0.65	85.5	90.5
093I10	0.75	117.5	0.65	88	92
094B02	0.75	117.5	0.6	91.5	93
094O16	0.9	89	0.4	136.5	94
094I08	0.75	117.5	0.5	111	99
094I10	0.75	117.5	0.5	111	99
094I11	0.75	117.5	0.5	111	99
094I12	0.75	117.5	0.5	111	99
094J07	0.75	117.5	0.5	111	99
094J08	0.75	117.5	0.5	111	99
094N15	0.75	117.5	0.5	111	99
094P11	0.75	117.5	0.5	111	99
094P13	0.75	117.5	0.5	111	99
093O15	0.75	117.5	0.45	129	107
094B06	0.75	117.5	0.45	129	107
094B11	0.75	117.5	0.45	129	107
094B12	0.75	117.5	0.45	129	107
094B13	0.75	117.5	0.45	129	107
094B14	0.75	117.5	0.45	129	107
094J04	0.75	117.5	0.45	129	107
094J11	0.6	165.5	0.65	85.5	111
094H04	0.45	203	0.95	51	113

094K10	0.75	117.5	0.4	136.5	113
094P10	0.75	117.5	0.4	136.5	113
093I08	0.6	165.5	0.6	91.5	115
093I13	0.6	165.5	0.55	95	116
094I02	0.75	117.5	0.35	146	120.5
094I03	0.75	117.5	0.35	146	120.5
094I04	0.75	117.5	0.35	146	120.5
094I06	0.75	117.5	0.35	146	120.5
094I07	0.75	117.5	0.35	146	120.5
094O12	0.75	117.5	0.35	146	120.5
094P09	0.75	117.5	0.35	146	120.5
094P16	0.75	117.5	0.35	146	120.5
094O01	0.9	89	0.25	175.5	125
094H05	0.45	203	0.8	65	126
094H08	0.6	165.5	0.5	111	129.5
094I13	0.6	165.5	0.5	111	129.5
094I16	0.6	165.5	0.5	111	129.5
094J03	0.6	165.5	0.5	111	129.5
094N16	0.6	165.5	0.5	111	129.5
094P15	0.6	165.5	0.5	111	129.5
093O06	0.75	117.5	0.3	164.5	138
093O14	0.75	117.5	0.3	164.5	138
094B05	0.75	117.5	0.3	164.5	138
094G14	0.75	117.5	0.3	164.5	138
094J05	0.75	117.5	0.3	164.5	138
094N03	0.75	117.5	0.3	164.5	138
094N06	0.75	117.5	0.3	164.5	138
094N11	0.75	117.5	0.3	164.5	138
094N12	0.75	117.5	0.3	164.5	138
094N14	0.75	117.5	0.3	164.5	138
094O10	0.45	203	0.75	79	138
094O09	0.6	165.5	0.45	122.5	144
094H01	0.45	203	0.65	85.5	145
094H12	0.45	203	0.6	89.5	146
093O01	0.6	165.5	0.45	129	148
093O07	0.6	165.5	0.45	129	148
093O10	0.6	165.5	0.45	129	148
094G11	0.75	117.5	0.2	178	150
094P12	0.45	203	0.55	98	151
093I06	0.75	117.5	0.15	194	155

094B04	0.75	117.5	0.15	194	155
094G04	0.75	117.5	0.15	194	155
094G13	0.75	117.5	0.15	194	155
094K09	0.75	117.5	0.15	194	155
094M09	0.75	117.5	0.15	194	155
094N05	0.75	117.5	0.15	194	155
094I14	0.45	203	0.5	111	161.5
094I15	0.45	203	0.5	111	161.5
094P01	0.45	203	0.5	111	161.5
094P03	0.45	203	0.5	111	161.5
094P06	0.45	203	0.5	111	161.5
094P07	0.45	203	0.5	111	161.5
094O07	0.6	165.5	0.3	154	165
093I11	0.6	165.5	0.3	164.5	169.5
093I12	0.6	165.5	0.3	164.5	169.5
093O11	0.6	165.5	0.3	164.5	169.5
094K16	0.6	165.5	0.3	164.5	169.5
094N02	0.6	165.5	0.3	164.5	169.5
094N08	0.6	165.5	0.3	164.5	169.5
094N09	0.6	165.5	0.3	164.5	169.5
094N13	0.6	165.5	0.3	164.5	169.5
093H16	0.75	117.5	0	214	176
094F01	0.75	117.5	0	214	176
094F08	0.75	117.5	0	214	176
094F10	0.75	117.5	0	214	176
094G05	0.75	117.5	0	214	176
094J06	0.45	203	0.45	129	179
094H15	0.6	165.5	0.2	178	180
094G16	0.45	203	0.35	146	184
094H11	0.45	203	0.35	146	184
094H13	0.45	203	0.35	146	184
094I01	0.45	203	0.35	146	184
094N10	0.45	203	0.35	146	184
094O05	0.45	203	0.35	146	184
094O11	0.45	203	0.35	146	184
093I07	0.6	165.5	0.15	194	194
094F15	0.6	165.5	0.15	194	194
094F16	0.6	165.5	0.15	194	194
094K01	0.6	165.5	0.15	194	194
094K08	0.6	165.5	0.15	194	194

<b>094K11</b>	0.6	165.5	0.15	194	194
<b>094L08</b>	0.6	165.5	0.15	194	194
<b>094L09</b>	0.6	165.5	0.15	194	194
<b>094M02</b>	0.6	165.5	0.15	194	194
<b>094M07</b>	0.6	165.5	0.15	194	194
<b>094M10</b>	0.6	165.5	0.15	194	194
<b>094M16</b>	0.6	165.5	0.15	194	194
<b>094O03</b>	0.6	165.5	0.15	194	194
<b>094N01</b>	0.45	203	0.3	164.5	201.5
<b>094N07</b>	0.45	203	0.3	164.5	201.5
<b>094O06</b>	0.45	203	0.25	175.5	203
<b>093I01</b>	0.6	165.5	0	214	206.5
<b>093I02</b>	0.6	165.5	0	214	206.5
<b>094F09</b>	0.6	165.5	0	214	206.5
<b>094M06</b>	0.6	165.5	0	214	206.5
<b>094M11</b>	0.6	165.5	0	214	206.5
<b>094M15</b>	0.6	165.5	0	214	206.5
<b>094H14</b>	0.45	203	0.2	178	210
<b>094K02</b>	0.45	203	0.15	194	215
<b>094K03</b>	0.45	203	0.15	194	215
<b>094K05</b>	0.45	203	0.15	194	215
<b>094K06</b>	0.45	203	0.15	194	215
<b>094K07</b>	0.45	203	0.15	194	215
<b>094K12</b>	0.45	203	0.15	194	215
<b>094L16</b>	0.45	203	0.15	194	215
<b>094M01</b>	0.45	203	0.15	194	215
<b>094N04</b>	0.45	203	0.15	194	215

## Appendix I – Disturbance Sensitivity Results and Map Sheet Rankings for Groundwater Demand and Vulnerability

Map Sheet	Groundwater Demand	Rank of Groundwater Demand	Groundwater Vulnerability	Rank of Groundwater Vulnerability	Rank of Groundwater Demand + Groundwater Vulnerability
093P09	2.05	6.5	2.05	6	1
093P03	1.85	13	2.37	1	2
094A02	1.75	18	2.35	2	3
093P08	1.3	32	2.3	3	4
094A04	1.8	15.5	1.79	15	5
093P14	1.8	15.5	2.07	5	6
094A07	2.15	3	1.7	22	7
094B01	1.6	22	2.23	4	8
094A11	2.15	3	1.77	18.5	9
093P15	1.55	23.5	1.84	13	10
093O09	1.95	9	1.95	9	11
093P12	2.3	1	1.86	12	12
093I15	1.7	19	2.02	7	13
094A06	2.15	3	1.56	31	14
094J15	1.9	11	1.56	29	15
093P13	2	8	1.58	28	16
093P11	1.8	15.5	1.65	23.5	17
093P02	1.55	25	1.86	11	18
093P10	1.3	32	1.63	25	19
094A10	1.9	11	1.51	34	20
094A12	1.3	32	1.77	17	21
093P16	2.05	6.5	1.98	8	22
093P05	1.45	26	1.88	10	23
094J10	1.4	28	1.63	26	24
094A01	1.9	11	1.35	48.5	25.5
094B09	1.8	15.5	1.56	31	25.5
094A05	1.05	45.5	1.6	27	27
094A14	1.65	20.5	1.49	36	28
094A03	1.25	34	1.79	15	29
093I14	0.8	70	1.74	20.5	30.5
093P01	0.8	70	1.51	34	30.5
094A15	1.4	28	1.37	47	32

094A08	1.65	20.5	1.21	64	33
094G01	1.05	45.5	1.77	18.5	34
093P07	1.1	42	1.49	39.5	35
093P04	1.55	23.5	1.46	43	36
094B08	1.05	45.5	1.79	15	37
094B15	2.1	5	1.28	54	38
093O16	1.2	35	1.65	23.5	39
094B16	1.05	45.5	1.56	31	40
094A13	1.05	45.5	1.49	39.5	41
093I09	0.75	79	1.74	20.5	42
094G02	1.05	45.5	1.49	39.5	43
094B10	1.15	38.5	1.23	61.5	44
094J02	1.15	38.5	1.28	54	45
093I16	1.15	36	1.23	58.5	46
094H03	0.9	54	1.49	39.5	47
094H06	1.15	38.5	1.28	54	48.5
094P04	1	49.5	1.44	45	48.5
094O08	0.8	65	1.51	34	50
093O08	1.35	30	1.18	71	52
094G07	0.75	79	1.49	39.5	52
094H02	1.4	28	1.21	64	52
094A09	0.9	54	1.21	67.5	54
094O02	0.5	99.5	1.21	64	55
094J09	0.75	74.5	1.21	67.5	56
094A16	0.9	54	1.09	86.5	57.5
094G08	0.8	65	1.35	50.5	57.5
094G10	0.8	70	1.42	46	59
094I09	1.1	41	0.93	114	60
094O15	0.8	65	0.95	108	61
094O14	0.85	59	1.11	81	62
094G09	0.85	59	1.21	67.5	63
094I05	0.75	74.5	1.02	98	65
094O13	0.55	95	1.18	71	65
094P02	1	49.5	1.07	91.5	65
094H04	0.95	51	1.49	39.5	67
094G15	0.85	59	1.07	91.5	68
094P14	0.85	59	0.95	108	69
094K14	0.8	65	0.88	118	70.5
094P05	0.75	74.5	1.09	86.5	70.5
094G06	0.7	81.5	1.04	93.5	72

093P06	0.65	85.5	1.16	75	73
094I12	0.5	111	1.21	67.5	74
094H16	0.85	59	1	102	75
094P08	0.6	89.5	1.02	95	76
093I10	0.65	88	1.11	81	77
094B02	0.6	91.5	1.11	81	78
094H05	0.8	65	1.35	50.5	79
094I11	0.5	111	1.14	78.5	80
094B03	0.7	83	0.83	124.5	81
094H07	0.9	54	0.86	121.5	82
094O01	0.25	175.5	1.23	58.5	83
094J08	0.5	111	1.09	86.5	84.5
094P11	0.5	111	1.09	86.5	84.5
094J14	1.15	38.5	0.86	121.5	86
094G03	0.75	74.5	0.83	124.5	87
094I13	0.5	111	1.23	61.5	88
094H10	0.7	81.5	0.93	111.5	89
094O09	0.45	122.5	1.3	52	90
094B07	0.65	85.5	0.95	108	91
093O10	0.45	129	1.25	56	92
094N16	0.5	111	1.16	75	93.5
094P15	0.5	111	1.16	75	93.5
094P07	0.5	111	1.44	44	95
094O12	0.35	146	1.09	86.5	96.5
094P13	0.5	111	0.95	108	96.5
094H09	0.45	122.5	0.86	119.5	98.5
094O04	0.8	65	0.79	134.5	98.5
094P12	0.55	98	1.23	58.5	100
094I14	0.5	111	1.35	48.5	101
093O15	0.45	129	0.97	104.5	102
094I10	0.5	111	0.93	114	103
094P10	0.4	136.5	1	102	104
094I02	0.35	146	1.02	98	105.5
094I04	0.35	146	1.02	98	105.5
094J12	0.55	95	0.79	134.5	107
093I13	0.55	95	0.97	104.5	108
094B11	0.45	129	0.9	116.5	109.5
094O16	0.4	136.5	0.81	129.5	109.5
094M08	0.55	95	0.76	139.5	111
094H12	0.6	89.5	1.14	78.5	112

094I08	0.5	111	0.81	129.5	113
094J13	0.55	95	0.72	150.5	114
093I08	0.6	91.5	0.9	116.5	115.5
094H08	0.5	111	1	102	115.5
094O10	0.75	79	1.02	98	117
094K15	0.8	65	0.46	207	118
094J16	0.75	74.5	0.72	150.5	119
094N09	0.3	164.5	1.18	71	120
093O07	0.45	129	1.04	93.5	121
094O11	0.35	146	1.23	58.5	122
094K13	0.4	136.5	0.69	157.5	123
093O13	0.9	54	0.62	171.5	124.5
094B14	0.45	129	0.76	139.5	124.5
094P06	0.5	111	1.09	86.5	126
094I16	0.5	111	0.86	119.5	127
094I06	0.35	146	0.81	129.5	128.5
094P16	0.35	146	0.81	129.5	128.5
094O07	0.3	154	1.09	86.5	130
094K10	0.4	136.5	0.76	139.5	131
094O05	0.35	146	1.16	75	132
094J11	0.65	85.5	0.72	150.5	133
094B13	0.45	129	0.69	157.5	134
094J07	0.5	111	0.65	166	135.5
094N15	0.5	111	0.65	166	135.5
094I03	0.35	146	0.74	145.5	138
094I07	0.35	146	0.74	145.5	138
094P09	0.35	146	0.74	145.5	138
094N08	0.3	164.5	1.02	98	140
094O03	0.15	194	1.16	75	141
094P01	0.5	111	0.95	108	142
094G12	0.5	99.5	0.55	186	143
094P03	0.5	111	0.93	114	144
093O14	0.3	164.5	0.76	139.5	145
094H01	0.65	85.5	0.79	134.5	146.5
094N05	0.15	194	0.83	124.5	146.5
094B06	0.45	129	0.6	175	148
094N14	0.3	164.5	0.74	145.5	149
094J01	0.75	74.5	0.44	208	150
093O01	0.45	129	0.76	139.5	151
094O06	0.25	175.5	1.09	86.5	152

094I15	0.5	111	0.81	129.5	153
094B12	0.45	129	0.55	186	154
094H11	0.35	146	0.93	111.5	155.5
094N06	0.3	164.5	0.69	157.5	155.5
094J04	0.45	129	0.53	193.5	157.5
094K09	0.15	194	0.74	145.5	157.5
094N11	0.3	164.5	0.65	166	159
094N03	0.3	164.5	0.62	171.5	160
094G04	0.15	194	0.69	157.5	162
094G13	0.15	194	0.69	157.5	162
094M09	0.15	194	0.69	157.5	162
094G11	0.2	178	0.67	163	164
094N10	0.35	146	0.81	129.5	165
093I07	0.15	194	0.83	124.5	166
094B05	0.3	164.5	0.55	186	167
094B04	0.15	194	0.62	171.5	168
093I11	0.3	164.5	0.69	157.5	170
093O11	0.3	164.5	0.69	157.5	170
094N13	0.3	164.5	0.69	157.5	170
094I01	0.35	146	0.74	145.5	172
094H15	0.2	178	0.72	150.5	173
094N12	0.3	164.5	0.53	193.5	174
094G14	0.3	164.5	0.51	195	175
094M16	0.15	194	0.76	139.5	176
093O06	0.3	164.5	0.48	201	177
094J03	0.5	111	0.37	214.5	178
094H14	0.2	178	0.79	134.5	179
094N02	0.3	164.5	0.58	177.5	180
094G05	0	214	0.62	171.5	181
094J05	0.3	164.5	0.39	211	182
094G16	0.35	146	0.65	166	183
094K11	0.15	194	0.69	157.5	184
093I06	0.15	194	0.48	201	185
094J06	0.45	129	0.58	177.5	186
094H13	0.35	146	0.58	177.5	187
093H16	0	214	0.55	186	189
094F01	0	214	0.55	186	189
094F08	0	214	0.55	186	189
094N01	0.3	164.5	0.65	166	191
093I12	0.3	164.5	0.48	201	192

094F10	0	214	0.48	201	193
094F09	0	214	0.62	171.5	194
094N07	0.3	164.5	0.58	177.5	195
094K01	0.15	194	0.55	186	196.5
094K08	0.15	194	0.55	186	196.5
094K16	0.3	164.5	0.37	214.5	198
094N04	0.15	194	0.62	171.5	199
093I01	0	214	0.55	186	200
094F15	0.15	194	0.48	201	201.5
094F16	0.15	194	0.48	201	201.5
094K05	0.15	194	0.55	186	204.5
094K06	0.15	194	0.55	186	204.5
094K07	0.15	194	0.55	186	204.5
094K12	0.15	194	0.55	186	204.5
094L09	0.15	194	0.39	211	208
094M07	0.15	194	0.39	211	208
094M10	0.15	194	0.39	211	208
093I02	0	214	0.48	201	210
094L08	0.15	194	0.32	217	211.5
094M02	0.15	194	0.32	217	211.5
094K02	0.15	194	0.48	201	214.5
094K03	0.15	194	0.48	201	214.5
094L16	0.15	194	0.48	201	214.5
094M01	0.15	194	0.48	201	214.5
094M15	0	214	0.39	211	217
094M11	0	214	0.32	217	218
094M06	0	214	0.16	219	219