Stock Crossings

Presentation
to RCAF
9 December 2005

Council Objective:

To eliminate all at grade stock crossings in the district by the year 2015

Proposed "Livestock Movement Bylaw"

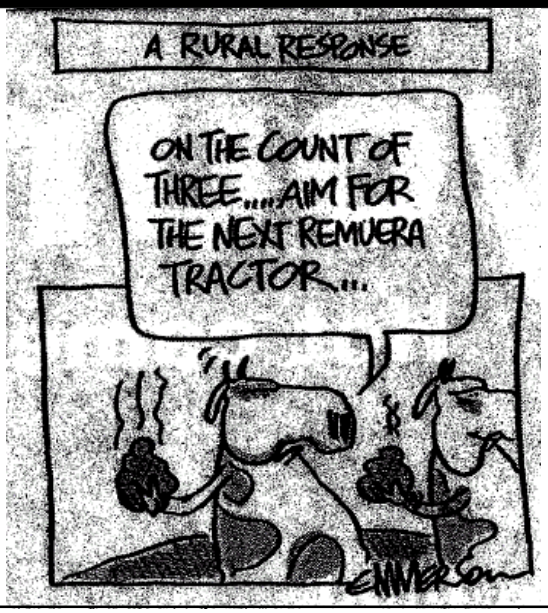
- No new crossing permits issued
- Existing permits reviewed every 2 years
- Permits renewed at Council's pleasure
- Up to 25% subsidy for existing crossings
- All crossings and droving to comply with approved traffic management plans

Consultation

- Initially through a radio, newspaper and television media frenzy
- Lots of meetings with Federated Farmers
- Dedicated staff member to resource the exercise and talk to farmers
- Special consultative process for the bylaw
  - 39 submissions received; 17 heard

Waikato DISTRICT COUNCIL

NZ Herald cartoon



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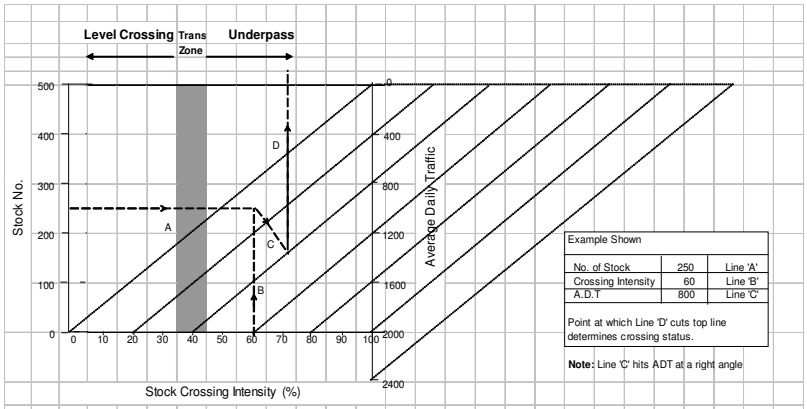
Key Issues

If you allow some at grade crossings a clear criteria is required

- Various graphical (e.g. Matamata Piako DC)
- RCAF working party graph
- Federated Farmers' delay spreadsheet
- Something simpler?
- Can we standardise nationally?

Waikato District Council

Matamata Piako DC Graph

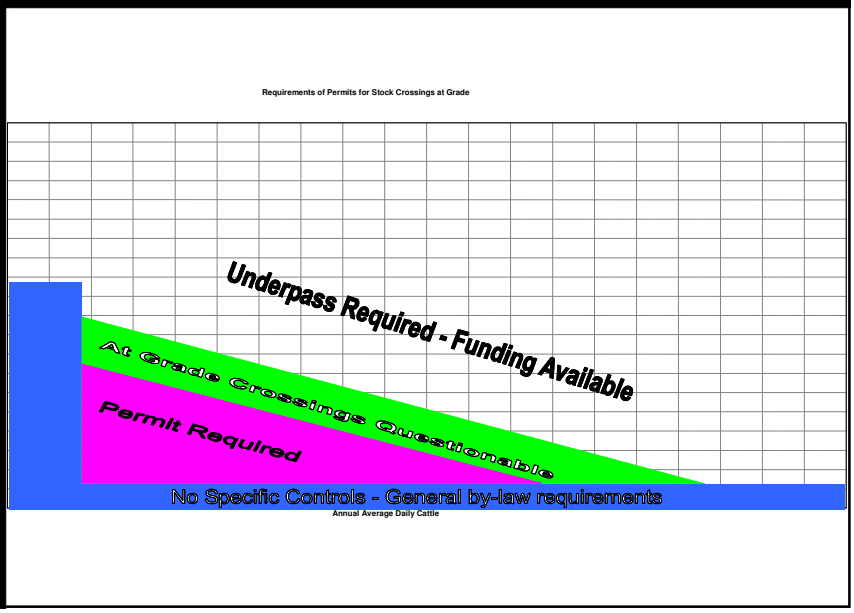


Note: Stock Crossing Intensity = the percentage of dairying land on the opposite side of the road to the milking shed

STOCK MOVEMENT - GRAPH TO DETERMINE CROSSING STATUS

Waikato District Council

RCAF Working Group Concept



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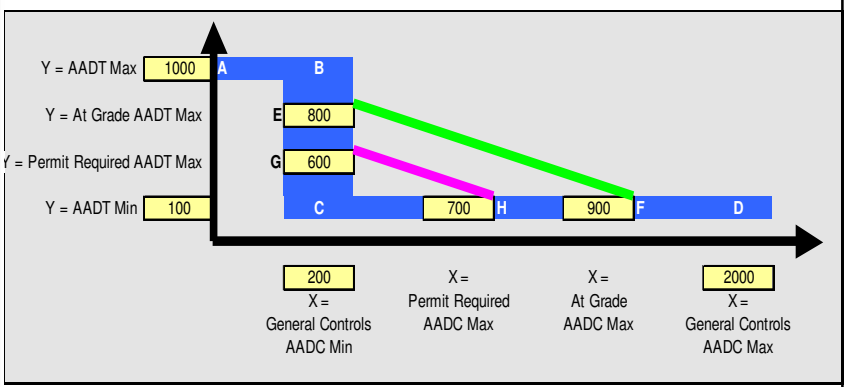
RCAF Working Group graph



Waikato District Council

Federated Farmers

Number of cars stopped

Time per crossing @ 10 minutes for 350 cows

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Cars per hour over 18 hours	Time between Cars (mins)		AADT	AADC 50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
		Time to cross (mins		1.4	2.9	4.3	5.7	7.1	8.6	10.0	11.4	12.9	14.3	15.7	17.1	18.6	20.0	21.4	22.9	24.3	25.7	27.1	28.6	30.0	31.4	32.9	34.3	35.7	37.1	38.6	40.0	41.4	42.9
3	21.6	50		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.12	1.19	1.26	1.32	1.39	1.46	1.52	1.59	1.65	1.72	1.79	1.85	1.92	1.98
6	10.8	100		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.19	1.32	1.46	1.59	1.72	1.85	1.98	2.12	2.25	2.38	2.51	2.65	2.78	2.91	3.04	3.17	3.31	3.44	3.57	3.70	3.84	3.97
8	7.2	150		0.00	0.00	0.00	0.00	0.00	1.19	1.39	1.59	1.79	1.98	2.18	2.38	2.58	2.78	2.98	3.17	3.37	3.57	3.77	3.97	4.17	4.37	4.56	4.76	4.96	5.16	5.36	5.56	5.75	5.95
11	5.4	200		0.00	0.00	0.00	0.00	1.06	1.32	1.59	1.85	2.12	2.38	2.65	2.91	3.17	3.44	3.70	3.97	4.23	4.50	4.76	5.03	5.29	5.56	5.82	6.08	6.35	6.61	6.88	7.14	7.41	7.67	7.94
14	4.3	250		0.00	0.00	0.00	0.00	1.32	1.65	1.98	2.31	2.65	2.98	3.31	3.64	3.97	4.30	4.63	4.96	5.29	5.62	5.95	6.28	6.61	6.94	7.28	7.61	7.94	8.27	8.60	8.93	9.26	9.59	9.92
17	3.6	300		0.00	0.00	1.19	1.59	1.98	2.38	2.78	3.17	3.57	3.97	4.37	4.76	5.16	5.56	5.95	6.35	6.75	7.14	7.54	7.94	8.33	8.73	9.13	9.52	9.92	10.32	10.71	11.11	11.51	11.90
19	3.1	350		0.00	0.00	1.39	1.85	2.31	2.78	3.24	3.70	4.17	4.63	5.09	5.56	6.02	6.48	6.94	7.41	7.87	8.33	8.80	9.26	9.72	10.19	10.65	11.11	11.57	12.04	12.50	12.96	13.43	13.89
22	2.7	400		0.00	0.00	1.06	1.59	2.12	2.65	3.17	3.70	4.23	4.76	5.29	5.82	6.35	6.88	7.41	7.94	8.47	8.99	9.52	10.05	10.58	11.11	11.64	12.17	12.70	13.23	13.76	14.29	14.81	15.34	15.87
25	2.4	450		0.00	1.19	1.79	2.38	2.98	3.57	4.17	4.76	5.36	5.95	6.55	7.14	7.74	8.33	8.93	9.52	10.12	10.71	11.31	11.90	12.50	13.10	13.69	14.29	14.88	15.48	16.07	16.67	17.26	17.86
28	2.2	500		0.00	1.32	1.98	2.65	3.31	3.97	4.63	5.29	5.95	6.61	7.28	7.94	8.60	9.26	9.92	10.58	11.24	11.90	12.57	13.23	13.89	14.55	15.21	15.87	16.53	17.20	17.86	18.52	19.18	19.84
31	2.0	550		0.00	1.46	2.18	2.91	3.64	4.37	5.09	5.82	6.55	7.28	8.00	8.73	9.46	10.19	10.91	11.64	12.37	13.10	13.82	14.55	15.28	16.01	16.73	17.46	18.19	18.92	19.64	20.37	21.10	21.83
33	1.8	600		0.00	1.59	2.38	3.17	3.97	4.76	5.56	6.35	7.14	7.94	8.73	9.52	10.32	11.11	11.90	12.70	13.49	14.29	15.08	15.87	16.67	17.46	18.25	19.05	19.84	20.63	21.43	22.22	23.02	23.81
36	1.7	650		0.00	1.72	2.58	3.44	4.30	5.16	6.02	6.88	7.74	8.60	9.46	10.32	11.18	12.04	12.90	13.76	14.62	15.48	16.34	17.20	18.06	18.92	19.78	20.63	21.49	22.35	23.21	24.07	24.93	25.79
39	1.5	700		0.00	1.85	2.78	3.70	4.63	5.56	6.48	7.41	8.33	9.26	10.19	11.11	12.04	12.96	13.89	14.81	15.74	16.67	17.59	18.52	19.44	20.37	21.30	22.22	23.15	24.07	25.00	25.93	26.85	27.78
42	1.4	750		0.00	1.98	2.98	3.97	4.96	5.95	6.94	7.94	8.93	9.92	10.91	11.90	12.90	13.89	14.88	15.87	16.87	17.86	18.85	19.84	20.83	21.83	22.82	23.81	24.80	25.79	26.79	27.78	28.77	29.76
44	1.4	800		1.06	2.12	3.17	4.23	5.29	6.35	7.41	8.47	9.52	10.58	11.64	12.70	13.76	14.81	15.87	16.93	17.99	19.05	20.11	21.16	22.22	23.28	24.34	25.40	26.46	27.51	28.57	29.63	30.69	31.75
47	1.3	850		1.12	2.25	3.37	4.50	5.62	6.75	7.87	8.99	10.12	11.24	12.37	13.49	14.62	15.74	16.87	17.99	19.11	20.24	21.36	22.49	23.61	24.74	25.86	26.98	28.11	29.23	30.36	31.48	32.61	33.73
50	1.2	900		1.19	2.38	3.57	4.76	5.95	7.14	8.33	9.52	10.71	11.90	13.10	14.29	15.48	16.67	17.86	19.05	20.24	21.43	22.62	23.81	25.00	26.19	27.38	28.57	29.76	30.95	32.14	33.33	34.52	35.7
53	1.1	950		1.26	2.51	3.77	5.03	6.28	7.54	8.80	10.05	11.31	12.57	13.82	15.08	16.34	17.59	18.85	20.11	21.36	22.62	23.88	25.13	26.39	27.65	28.90	30.16	31.42	32.67	33.93	35.19	36.44	37.70
56	1.1	1000		1.32	2.65	3.97	5.29	6.61	7.94	9.26	10.58	11.90	13.23	14.55	15.87	17.20	18.52	19.84	21.16	22.49	23.81	25.13	26.46	27.78	29.10	30.42	31.75	33.07	34.39	35.71	37.04	38.36	39.68
58	1.0	1050		1.39	2.78	4.17	5.56	6.94	8.33	9.72	11.11	12.50	13.89	15.28	16.67	18.06	19.44	20.83	22.22	23.61	25.00	26.39	27.78	29.17	30.56	31.94	33.33	34.72	36.11	37.50	38.89	40.28	41.67
61	1.0	1100		1.46	2.91	4.37	5.82	7.28	8.73	10.19	11.64	13.10	14.55	16.01	17.46	18.92	20.37	21.83	23.28	24.74	26.19	27.65	29.10	30.56	32.01	33.47	34.92	36.38	37.83	39.29	40.74	42.20	43.65
64	0.9	1150		1.52	3.04	4.56	6.08	7.61	9.13	10.65	12.17	13.69	15.21	16.73	18.25	19.78	21.30	22.82	24.34	25.86	27.38	28.90	30.42	31.94	33.47	34.99	36.51	38.03	39.55	41.07	42.59	44.11	45.63
67	0.9	1200		1.59	3.17	4.76	6.35	7.94	9.52	11.11	12.70	14.29	15.87	17.46	19.05	20.63	22.22	23.81	25.40	26.98	28.57	30.16	31.75	33.33	34.92	36.51	38.10	39.68	41.27	42.86	44.44	46.03	47.62
69	0.9	1250		1.65	3.31	4.96	6.61	8.27	9.92	11.57	13.23	14.88	16.53	18.19	19.84	21.49	23.15	24.80	26.46	28.11	29.76	31.42	33.07	34.72	36.38	38.03	39.68	41.34	42.99	44.64	46.30	47.95	49.60
72	0.8	1300		1.72	3.44	5.16	6.88	8.60	10.32	12.04	13.76	15.48	17.20	18.92	20.63	22.35	24.07	25.79	27.51	29.23	30.95	32.67	34.39	36.11	37.83	39.55	41.27	42.99	44.71	46.43	48.15	49.87	51.59
75	0.8	1350		1.79	3.57	5.36	7.14	8.93	10.71	12.50	14.29	16.07	17.86	19.64	21.43	23.21	25.00	26.79	28.57	30.36	32.14	33.93	35.71	37.50	39.29	41.07	42.86	44.64	46.43	48.21	50.00	51.79	53.57
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81	0.7	1450		1.92	3.84	5.75	7.67	9.59	11.51	13.43	15.34	17.26	19.18	21.10	23.02	24.93	26.85	28.77	30.69	32.61	34.52	36.44	38.36	40.28	42.20	44.11	46.03	47.95	49.87	51.79	53.70	55.62	57.54
83	0.7	1500		1.98	3.97	5.95	7.94	9.92	11.90	13.89	15.87	17.86	19.84	21.83	23.81	25.79	27.78	29.76	31.75	33.73	35.71	37.70	39.68	41.67	43.65	45.63	47.62	49.60	51.59	53.57	55.56	57.54	59.52

Key Issues

It's not just dairy cows

- 147 crossing permit applications
- 60 "movement" permit applications
- Dairy and dry stock are moved regularly
- 400 baby goats…?…

25 08 2005
Waikato
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07/12/2005
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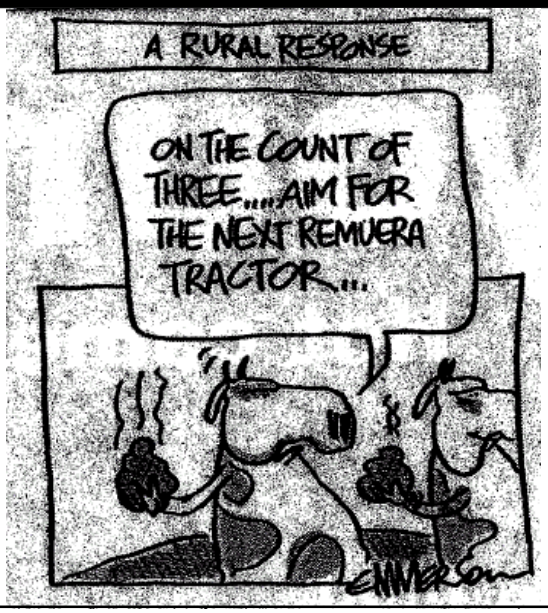

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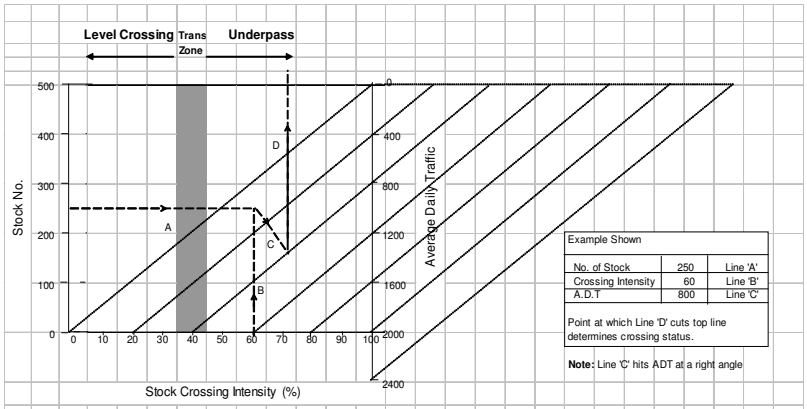

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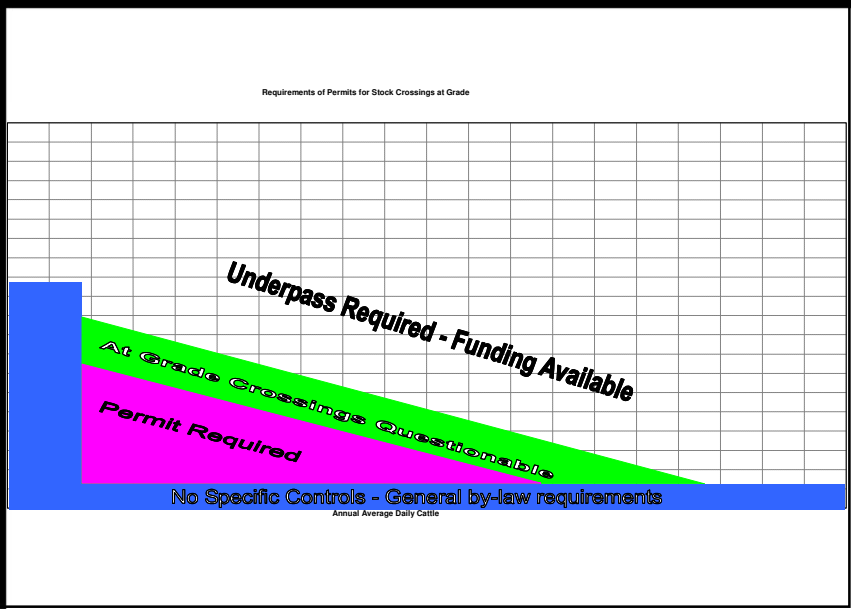

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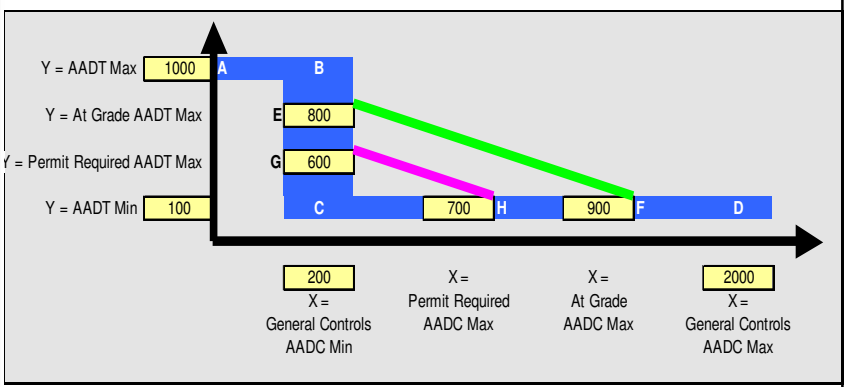

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3	21.6	50		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.12	1.19	1.26	1.32	1.39	1.46	1.52	1.59	1.65	1.72	1.79	1.85	1.92	1.98
6	10.8	100		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.19	1.32	1.46	1.59	1.72	1.85	1.98	2.12	2.25	2.38	2.51	2.65	2.78	2.91	3.04	3.17	3.31	3.44	3.57	3.70	3.84	3.97
8	7.2	150		0.00	0.00	0.00	0.00	0.00	1.19	1.39	1.59	1.79	1.98	2.18	2.38	2.58	2.78	2.98	3.17	3.37	3.57	3.77	3.97	4.17	4.37	4.56	4.76	4.96	5.16	5.36	5.56	5.75	5.95
11	5.4	200		0.00	0.00	0.00	0.00	1.06	1.32	1.59	1.85	2.12	2.38	2.65	2.91	3.17	3.44	3.70	3.97	4.23	4.50	4.76	5.03	5.29	5.56	5.82	6.08	6.35	6.61	6.88	7.14	7.41	7.67	7.94
14	4.3	250		0.00	0.00	0.00	0.00	1.32	1.65	1.98	2.31	2.65	2.98	3.31	3.64	3.97	4.30	4.63	4.96	5.29	5.62	5.95	6.28	6.61	6.94	7.28	7.61	7.94	8.27	8.60	8.93	9.26	9.59	9.92
17	3.6	300		0.00	0.00	1.19	1.59	1.98	2.38	2.78	3.17	3.57	3.97	4.37	4.76	5.16	5.56	5.95	6.35	6.75	7.14	7.54	7.94	8.33	8.73	9.13	9.52	9.92	10.32	10.71	11.11	11.51	11.90
19	3.1	350		0.00	0.00	1.39	1.85	2.31	2.78	3.24	3.70	4.17	4.63	5.09	5.56	6.02	6.48	6.94	7.41	7.87	8.33	8.80	9.26	9.72	10.19	10.65	11.11	11.57	12.04	12.50	12.96	13.43	13.89
22	2.7	400		0.00	0.00	1.06	1.59	2.12	2.65	3.17	3.70	4.23	4.76	5.29	5.82	6.35	6.88	7.41	7.94	8.47	8.99	9.52	10.05	10.58	11.11	11.64	12.17	12.70	13.23	13.76	14.29	14.81	15.34	15.87
25	2.4	450		0.00	1.19	1.79	2.38	2.98	3.57	4.17	4.76	5.36	5.95	6.55	7.14	7.74	8.33	8.93	9.52	10.12	10.71	11.31	11.90	12.50	13.10	13.69	14.29	14.88	15.48	16.07	16.67	17.26	17.86
28	2.2	500		0.00	1.32	1.98	2.65	3.31	3.97	4.63	5.29	5.95	6.61	7.28	7.94	8.60	9.26	9.92	10.58	11.24	11.90	12.57	13.23	13.89	14.55	15.21	15.87	16.53	17.20	17.86	18.52	19.18	19.84
31	2.0	550		0.00	1.46	2.18	2.91	3.64	4.37	5.09	5.82	6.55	7.28	8.00	8.73	9.46	10.19	10.91	11.64	12.37	13.10	13.82	14.55	15.28	16.01	16.73	17.46	18.19	18.92	19.64	20.37	21.10	21.83
33	1.8	600		0.00	1.59	2.38	3.17	3.97	4.76	5.56	6.35	7.14	7.94	8.73	9.52	10.32	11.11	11.90	12.70	13.49	14.29	15.08	15.87	16.67	17.46	18.25	19.05	19.84	20.63	21.43	22.22	23.02	23.81
36	1.7	650		0.00	1.72	2.58	3.44	4.30	5.16	6.02	6.88	7.74	8.60	9.46	10.32	11.18	12.04	12.90	13.76	14.62	15.48	16.34	17.20	18.06	18.92	19.78	20.63	21.49	22.35	23.21	24.07	24.93	25.79
39	1.5	700		0.00	1.85	2.78	3.70	4.63	5.56	6.48	7.41	8.33	9.26	10.19	11.11	12.04	12.96	13.89	14.81	15.74	16.67	17.59	18.52	19.44	20.37	21.30	22.22	23.15	24.07	25.00	25.93	26.85	27.78
42	1.4	750		0.00	1.98	2.98	3.97	4.96	5.95	6.94	7.94	8.93	9.92	10.91	11.90	12.90	13.89	14.88	15.87	16.87	17.86	18.85	19.84	20.83	21.83	22.82	23.81	24.80	25.79	26.79	27.78	28.77	29.76
44	1.4	800		1.06	2.12	3.17	4.23	5.29	6.35	7.41	8.47	9.52	10.58	11.64	12.70	13.76	14.81	15.87	16.93	17.99	19.05	20.11	21.16	22.22	23.28	24.34	25.40	26.46	27.51	28.57	29.63	30.69	31.75
47	1.3	850		1.12	2.25	3.37	4.50	5.62	6.75	7.87	8.99	10.12	11.24	12.37	13.49	14.62	15.74	16.87	17.99	19.11	20.24	21.36	22.49	23.61	24.74	25.86	26.98	28.11	29.23	30.36	31.48	32.61	33.73
50	1.2	900		1.19	2.38	3.57	4.76	5.95	7.14	8.33	9.52	10.71	11.90	13.10	14.29	15.48	16.67	17.86	19.05	20.24	21.43	22.62	23.81	25.00	26.19	27.38	28.57	29.76	30.95	32.14	33.33	34.52	35.7
53	1.1	950		1.26	2.51	3.77	5.03	6.28	7.54	8.80	10.05	11.31	12.57	13.82	15.08	16.34	17.59	18.85	20.11	21.36	22.62	23.88	25.13	26.39	27.65	28.90	30.16	31.42	32.67	33.93	35.19	36.44	37.70
56	1.1	1000		1.32	2.65	3.97	5.29	6.61	7.94	9.26	10.58	11.90	13.23	14.55	15.87	17.20	18.52	19.84	21.16	22.49	23.81	25.13	26.46	27.78	29.10	30.42	31.75	33.07	34.39	35.71	37.04	38.36	39.68
58	1.0	1050		1.39	2.78	4.17	5.56	6.94	8.33	9.72	11.11	12.50	13.89	15.28	16.67	18.06	19.44	20.83	22.22	23.61	25.00	26.39	27.78	29.17	30.56	31.94	33.33	34.72	36.11	37.50	38.89	40.28	41.67
61	1.0	1100		1.46	2.91	4.37	5.82	7.28	8.73	10.19	11.64	13.10	14.55	16.01	17.46	18.92	20.37	21.83	23.28	24.74	26.19	27.65	29.10	30.56	32.01	33.47	34.92	36.38	37.83	39.29	40.74	42.20	43.65
64	0.9	1150		1.52	3.04	4.56	6.08	7.61	9.13	10.65	12.17	13.69	15.21	16.73	18.25	19.78	21.30	22.82	24.34	25.86	27.38	28.90	30.42	31.94	33.47	34.99	36.51	38.03	39.55	41.07	42.59	44.11	45.63
67	0.9	1200		1.59	3.17	4.76	6.35	7.94	9.52	11.11	12.70	14.29	15.87	17.46	19.05	20.63	22.22	23.81	25.40	26.98	28.57	30.16	31.75	33.33	34.92	36.51	38.10	39.68	41.27	42.86	44.44	46.03	47.62
69	0.9	1250		1.65	3.31	4.96	6.61	8.27	9.92	11.57	13.23	14.88	16.53	18.19	19.84	21.49	23.15	24.80	26.46	28.11	29.76	31.42	33.07	34.72	36.38	38.03	39.68	41.34	42.99	44.64	46.30	47.95	49.60
72	0.8	1300		1.72	3.44	5.16	6.88	8.60	10.32	12.04	13.76	15.48	17.20	18.92	20.63	22.35	24.07	25.79	27.51	29.23	30.95	32.67	34.39	36.11	37.83	39.55	41.27	42.99	44.71	46.43	48.15	49.87	51.59
75	0.8	1350		1.79	3.57	5.36	7.14	8.93	10.71	12.50	14.29	16.07	17.86	19.64	21.43	23.21	25.00	26.79	28.57	30.36	32.14	33.93	35.71	37.50	39.29	41.07	42.86	44.64	46.43	48.21	50.00	51.79	53.57
78	0.8	1400		1.85	3.70	5.56	7.41	9.26	11.11	12.96	14.81	16.67	18.52	20.37	22.22	24.07	25.93	27.78	29.63	31.48	33.33	35.19	37.04	38.89	40.74	42.59	44.44	46.30	48.15	50.00	51.85	53.70	55.56
81	0.7	1450		1.92	3.84	5.75	7.67	9.59	11.51	13.43	15.34	17.26	19.18	21.10	23.02	24.93	26.85	28.77	30.69	32.61	34.52	36.44	38.36	40.28	42.20	44.11	46.03	47.95	49.87	51.79	53.70	55.62	57.54
83	0.7	1500		1.98	3.97	5.95	7.94	9.92	11.90	13.89	15.87	17.86	19.84	21.83	23.81	25.79	27.78	29.76	31.75	33.73	35.71	37.70	39.68	41.67	43.65	45.63	47.62	49.60	51.59	53.57	55.56	57.54	59.52

Key Issues

It's not just dairy cows

- 147 crossing permit applications
- 60 "movement" permit applications
- Dairy and dry stock are moved regularly
- 400 baby goats…?…

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Stock Crossings

Presentation
to RCAF
9 December 2005

Council Objective:

To eliminate all at grade stock crossings in the district by the year 2015

Proposed "Livestock Movement Bylaw"

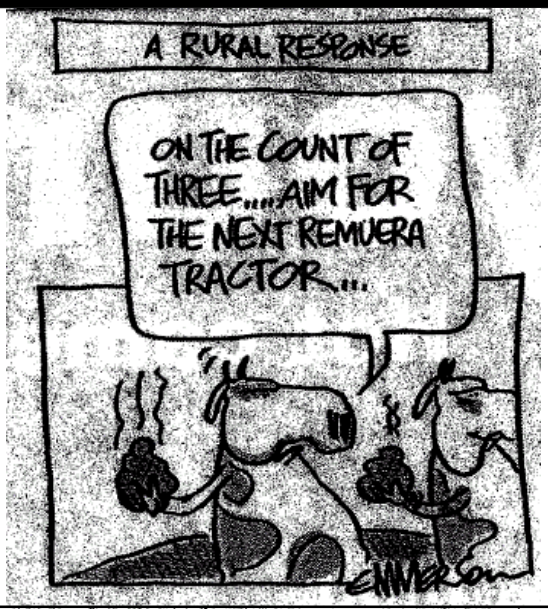
- No new crossing permits issued
- Existing permits reviewed every 2 years
- Permits renewed at Council's pleasure
- Up to 25% subsidy for existing crossings
- All crossings and droving to comply with approved traffic management plans

Consultation

- Initially through a radio, newspaper and television media frenzy
- Lots of meetings with Federated Farmers
- Dedicated staff member to resource the exercise and talk to farmers
- Special consultative process for the bylaw
  - 39 submissions received; 17 heard

Waikato DISTRICT COUNCIL

NZ Herald cartoon



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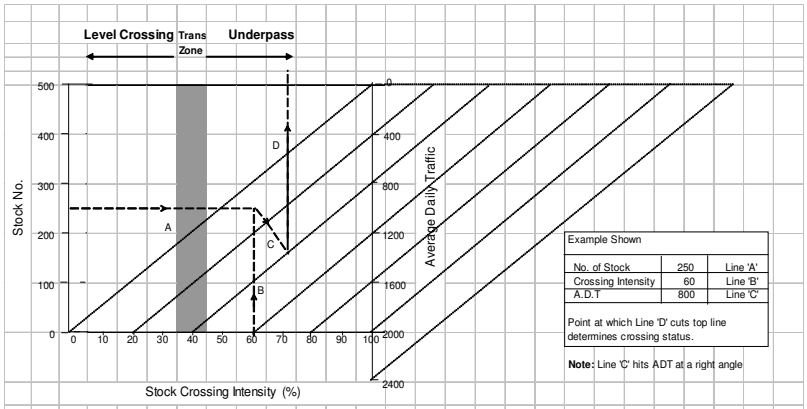
Key Issues

If you allow some at grade crossings a clear criteria is required

- Various graphical (e.g. Matamata Piako DC)
- RCAF working party graph
- Federated Farmers' delay spreadsheet
- Something simpler?
- Can we standardise nationally?

Waikato District Council

Matamata Piako DC Graph

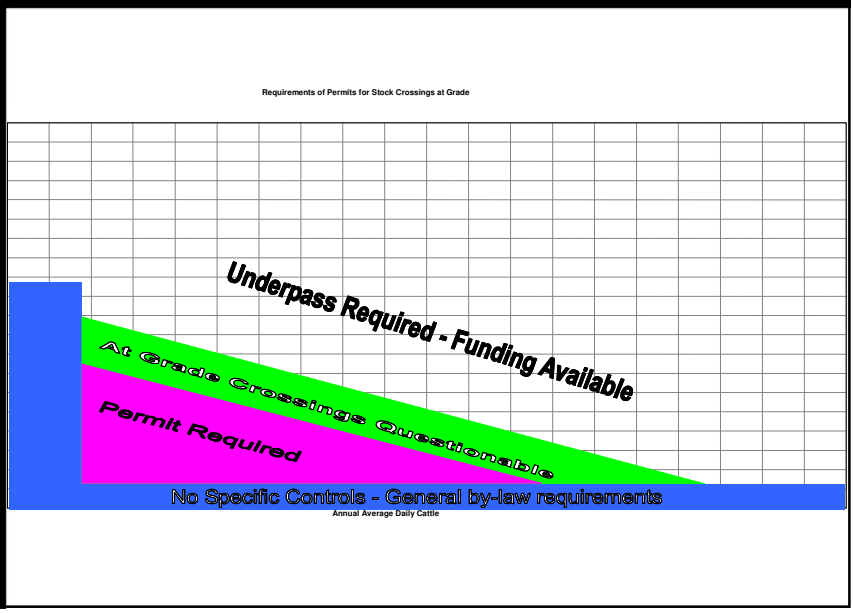


Note: Stock Crossing Intensity = the percentage of dairying land on the opposite side of the road to the milking shed

STOCK MOVEMENT - GRAPH TO DETERMINE CROSSING STATUS

Waikato District Council

RCAF Working Group Concept



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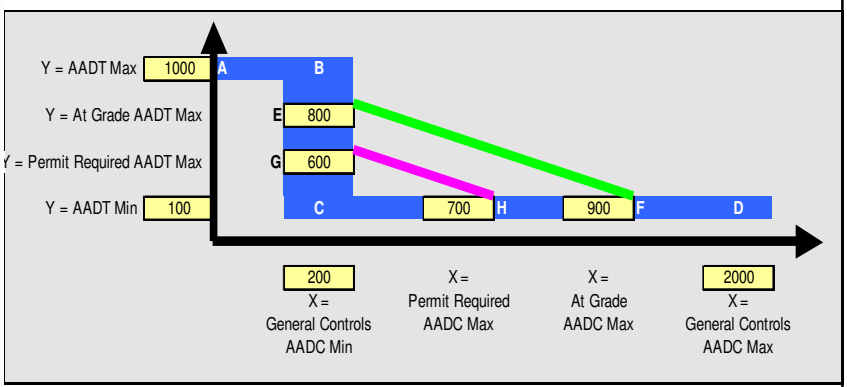
RCAF Working Group graph



Waikato District Council

Federated Farmers

Number of cars stopped

Time per crossing @ 10 minutes for 350 cows

35 cows per minute

Cars per hour over 18 hours	Time between Cars (mins)		AADT	AADC 50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
		Time to cross (mins		1.4	2.9	4.3	5.7	7.1	8.6	10.0	11.4	12.9	14.3	15.7	17.1	18.6	20.0	21.4	22.9	24.3	25.7	27.1	28.6	30.0	31.4	32.9	34.3	35.7	37.1	38.6	40.0	41.4	42.9
3	21.6	50		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.12	1.19	1.26	1.32	1.39	1.46	1.52	1.59	1.65	1.72	1.79	1.85	1.92	1.98
6	10.8	100		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.19	1.32	1.46	1.59	1.72	1.85	1.98	2.12	2.25	2.38	2.51	2.65	2.78	2.91	3.04	3.17	3.31	3.44	3.57	3.70	3.84	3.97
8	7.2	150		0.00	0.00	0.00	0.00	0.00	1.19	1.39	1.59	1.79	1.98	2.18	2.38	2.58	2.78	2.98	3.17	3.37	3.57	3.77	3.97	4.17	4.37	4.56	4.76	4.96	5.16	5.36	5.56	5.75	5.95
11	5.4	200		0.00	0.00	0.00	0.00	1.06	1.32	1.59	1.85	2.12	2.38	2.65	2.91	3.17	3.44	3.70	3.97	4.23	4.50	4.76	5.03	5.29	5.56	5.82	6.08	6.35	6.61	6.88	7.14	7.41	7.67	7.94
14	4.3	250		0.00	0.00	0.00	0.00	1.32	1.65	1.98	2.31	2.65	2.98	3.31	3.64	3.97	4.30	4.63	4.96	5.29	5.62	5.95	6.28	6.61	6.94	7.28	7.61	7.94	8.27	8.60	8.93	9.26	9.59	9.92
17	3.6	300		0.00	0.00	1.19	1.59	1.98	2.38	2.78	3.17	3.57	3.97	4.37	4.76	5.16	5.56	5.95	6.35	6.75	7.14	7.54	7.94	8.33	8.73	9.13	9.52	9.92	10.32	10.71	11.11	11.51	11.90
19	3.1	350		0.00	0.00	1.39	1.85	2.31	2.78	3.24	3.70	4.17	4.63	5.09	5.56	6.02	6.48	6.94	7.41	7.87	8.33	8.80	9.26	9.72	10.19	10.65	11.11	11.57	12.04	12.50	12.96	13.43	13.89
22	2.7	400		0.00	0.00	1.06	1.59	2.12	2.65	3.17	3.70	4.23	4.76	5.29	5.82	6.35	6.88	7.41	7.94	8.47	8.99	9.52	10.05	10.58	11.11	11.64	12.17	12.70	13.23	13.76	14.29	14.81	15.34	15.87
25	2.4	450		0.00	1.19	1.79	2.38	2.98	3.57	4.17	4.76	5.36	5.95	6.55	7.14	7.74	8.33	8.93	9.52	10.12	10.71	11.31	11.90	12.50	13.10	13.69	14.29	14.88	15.48	16.07	16.67	17.26	17.86
28	2.2	500		0.00	1.32	1.98	2.65	3.31	3.97	4.63	5.29	5.95	6.61	7.28	7.94	8.60	9.26	9.92	10.58	11.24	11.90	12.57	13.23	13.89	14.55	15.21	15.87	16.53	17.20	17.86	18.52	19.18	19.84
31	2.0	550		0.00	1.46	2.18	2.91	3.64	4.37	5.09	5.82	6.55	7.28	8.00	8.73	9.46	10.19	10.91	11.64	12.37	13.10	13.82	14.55	15.28	16.01	16.73	17.46	18.19	18.92	19.64	20.37	21.10	21.83
33	1.8	600		0.00	1.59	2.38	3.17	3.97	4.76	5.56	6.35	7.14	7.94	8.73	9.52	10.32	11.11	11.90	12.70	13.49	14.29	15.08	15.87	16.67	17.46	18.25	19.05	19.84	20.63	21.43	22.22	23.02	23.81
36	1.7	650		0.00	1.72	2.58	3.44	4.30	5.16	6.02	6.88	7.74	8.60	9.46	10.32	11.18	12.04	12.90	13.76	14.62	15.48	16.34	17.20	18.06	18.92	19.78	20.63	21.49	22.35	23.21	24.07	24.93	25.79
39	1.5	700		0.00	1.85	2.78	3.70	4.63	5.56	6.48	7.41	8.33	9.26	10.19	11.11	12.04	12.96	13.89	14.81	15.74	16.67	17.59	18.52	19.44	20.37	21.30	22.22	23.15	24.07	25.00	25.93	26.85	27.78
42	1.4	750		0.00	1.98	2.98	3.97	4.96	5.95	6.94	7.94	8.93	9.92	10.91	11.90	12.90	13.89	14.88	15.87	16.87	17.86	18.85	19.84	20.83	21.83	22.82	23.81	24.80	25.79	26.79	27.78	28.77	29.76
44	1.4	800		1.06	2.12	3.17	4.23	5.29	6.35	7.41	8.47	9.52	10.58	11.64	12.70	13.76	14.81	15.87	16.93	17.99	19.05	20.11	21.16	22.22	23.28	24.34	25.40	26.46	27.51	28.57	29.63	30.69	31.75
47	1.3	850		1.12	2.25	3.37	4.50	5.62	6.75	7.87	8.99	10.12	11.24	12.37	13.49	14.62	15.74	16.87	17.99	19.11	20.24	21.36	22.49	23.61	24.74	25.86	26.98	28.11	29.23	30.36	31.48	32.61	33.73
50	1.2	900		1.19	2.38	3.57	4.76	5.95	7.14	8.33	9.52	10.71	11.90	13.10	14.29	15.48	16.67	17.86	19.05	20.24	21.43	22.62	23.81	25.00	26.19	27.38	28.57	29.76	30.95	32.14	33.33	34.52	35.7
53	1.1	950		1.26	2.51	3.77	5.03	6.28	7.54	8.80	10.05	11.31	12.57	13.82	15.08	16.34	17.59	18.85	20.11	21.36	22.62	23.88	25.13	26.39	27.65	28.90	30.16	31.42	32.67	33.93	35.19	36.44	37.70
56	1.1	1000		1.32	2.65	3.97	5.29	6.61	7.94	9.26	10.58	11.90	13.23	14.55	15.87	17.20	18.52	19.84	21.16	22.49	23.81	25.13	26.46	27.78	29.10	30.42	31.75	33.07	34.39	35.71	37.04	38.36	39.68
58	1.0	1050		1.39	2.78	4.17	5.56	6.94	8.33	9.72	11.11	12.50	13.89	15.28	16.67	18.06	19.44	20.83	22.22	23.61	25.00	26.39	27.78	29.17	30.56	31.94	33.33	34.72	36.11	37.50	38.89	40.28	41.67
61	1.0	1100		1.46	2.91	4.37	5.82	7.28	8.73	10.19	11.64	13.10	14.55	16.01	17.46	18.92	20.37	21.83	23.28	24.74	26.19	27.65	29.10	30.56	32.01	33.47	34.92	36.38	37.83	39.29	40.74	42.20	43.65
64	0.9	1150		1.52	3.04	4.56	6.08	7.61	9.13	10.65	12.17	13.69	15.21	16.73	18.25	19.78	21.30	22.82	24.34	25.86	27.38	28.90	30.42	31.94	33.47	34.99	36.51	38.03	39.55	41.07	42.59	44.11	45.63
67	0.9	1200		1.59	3.17	4.76	6.35	7.94	9.52	11.11	12.70	14.29	15.87	17.46	19.05	20.63	22.22	23.81	25.40	26.98	28.57	30.16	31.75	33.33	34.92	36.51	38.10	39.68	41.27	42.86	44.44	46.03	47.62
69	0.9	1250		1.65	3.31	4.96	6.61	8.27	9.92	11.57	13.23	14.88	16.53	18.19	19.84	21.49	23.15	24.80	26.46	28.11	29.76	31.42	33.07	34.72	36.38	38.03	39.68	41.34	42.99	44.64	46.30	47.95	49.60
72	0.8	1300		1.72	3.44	5.16	6.88	8.60	10.32	12.04	13.76	15.48	17.20	18.92	20.63	22.35	24.07	25.79	27.51	29.23	30.95	32.67	34.39	36.11	37.83	39.55	41.27	42.99	44.71	46.43	48.15	49.87	51.59
75	0.8	1350		1.79	3.57	5.36	7.14	8.93	10.71	12.50	14.29	16.07	17.86	19.64	21.43	23.21	25.00	26.79	28.57	30.36	32.14	33.93	35.71	37.50	39.29	41.07	42.86	44.64	46.43	48.21	50.00	51.79	53.57
78	0.8	1400		1.85	3.70	5.56	7.41	9.26	11.11	12.96	14.81	16.67	18.52	20.37	22.22	24.07	25.93	27.78	29.63	31.48	33.33	35.19	37.04	38.89	40.74	42.59	44.44	46.30	48.15	50.00	51.85	53.70	55.56
81	0.7	1450		1.92	3.84	5.75	7.67	9.59	11.51	13.43	15.34	17.26	19.18	21.10	23.02	24.93	26.85	28.77	30.69	32.61	34.52	36.44	38.36	40.28	42.20	44.11	46.03	47.95	49.87	51.79	53.70	55.62	57.54
83	0.7	1500		1.98	3.97	5.95	7.94	9.92	11.90	13.89	15.87	17.86	19.84	21.83	23.81	25.79	27.78	29.76	31.75	33.73	35.71	37.70	39.68	41.67	43.65	45.63	47.62	49.60	51.59	53.57	55.56	57.54	59.52

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It's not just dairy cows

- 147 crossing permit applications
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