



Department of Primary Industries

BARLEY: Feed or Malting (Flood Irrigated - Border Check / Direct Drill)

Irrigated Winter - 2012

Murray Valley

1. GROSS MARGIN BUDGET:

INCOME:

4.00 tonnes/ha @ \$150 /t (on farm)

Standard Budget \$/ha	Your Budget \$/ha
\$600	

A. TOTAL INCOME \$/ha:

\$600	
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VARIABLE COSTS:

See following page for detail

Cultivation.....	\$0	
Sowing.....	\$102	
Fertiliser.....	\$172	
Herbicide.....	\$66	
Contract harvesting.....	\$63	
Levies.....	\$12	
Crop insurance.....	\$14	
Irrigation.....	\$13	
B. TOTAL VARIABLE COSTS \$/ha:	\$442	

C. GROSS MARGIN (A-B) \$/ha:

\$158	
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D. GROSS MARGIN \$/ML:

\$63	
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SENSITIVITY TABLES

2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$110 /t	\$130 /t	\$150 /t	\$170 /t	\$190 /t	
2.50	-\$150	-\$102	-\$54	-\$5	\$43	
3.00	-\$98	-\$40	\$18	\$76	\$134	
3.50	-\$46	\$22	\$90	\$158	\$225	
4.00	\$3	\$81	\$158	\$235	\$313	←
4.50	\$50	\$137	\$224	\$311	\$398	
5.00	\$96	\$193	\$290	\$386	\$483	
5.50	\$143	\$249	\$355	\$462	\$568	

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER ML*:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ML)
	\$110 /t	\$130 /t	\$150 /t	\$170 /t	\$190 /t	
2.50	-\$60	-\$41	-\$21	-\$2	\$17	
3.00	-\$39	-\$16	\$7	\$30	\$54	
3.50	-\$18	\$9	\$36	\$63	\$90	
4.00	\$1	\$32	\$63	\$94	\$125	←
4.50	\$20	\$55	\$90	\$124	\$159	
5.00	\$38	\$77	\$116	\$155	\$193	
5.50	\$57	\$100	\$142	\$185	\$227	

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

BARLEY: Feed or Malting (Flood Irrigated - Border Check / Direct Drill)

Murray Valley

Irrigated Winter - 2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	Total Cost \$/ha
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Dec/Jan	Contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
spray Metsulfuron methyl (eg Ally)	with above				0.005kg/ha	\$66/kg	\$0.33	\$0.33
spray Triclopyr (eg Garlon)	with above				0.160 L/ha	\$20.30/L	\$3.25	\$3.25
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Feb	Contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
Pre-sowing weed control eg ground spray glyphosate 450	May/June	Contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
Trifluralin (180g/L)	with above				1.50 L/ha	\$10.10/L	\$15.15	\$15.15
Sow	May/June	0.17	\$62.38	\$10.48	90kg/ha	\$1.02/kg	\$91.80	\$102.28
Apply starter fertiliser (<i>eg. DAP</i>)	with above				125kg/ha	\$0.760/kg	\$95.00	\$95.00
Seed dressing	with above				0.13kg/ha	\$35.30/kg	\$4.41	\$4.41
Topdress nitrogen fertiliser (<i>eg. broadcast urea</i>)	Jun/Jul	0.17	\$62.38	\$10.48	125kg/ha	\$0.530/kg	\$66.25	\$76.73
Contract harvest	Nov	contract		\$52.94				\$52.94
Chaser Bin		0.22	\$45.05	\$9.91				\$9.91
Irrigation					2.5ML/ha	\$5.15/ML	\$12.88	\$12.88
Crop Levies			\$1.5 /t	+	1.02% of on-farm value			\$12.09
Crop Insurance					2.280% of on-farm value			\$13.68

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

AGRONOMIC NOTES:

Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.

Always read chemical labels and follow directions carefully, as it is your legal responsibility to do so.

- Rotation:** - This is the first crop following wheat.
- Varieties:** - Refer to the NSW DPI "*Winter crop variety sowing guide 2012*". Varieties are reviewed annually for disease resistance and quality characteristics
- Weed Control:** - Herbicides are boomsprayed in a dry year and aerial sprayed in a wet year.
- This budget includes a full summer weed control program to maximise stored moisture
- An additional broadleaf herbicide may be required if wireweed and toadrush are a problem.
- Incorporate by sowing required within 24 hours of application of trifluralin
- Seed Dressing:** - Seed dressing is required for the control of leaf diseases, especially scald.
- Irrigation:** - This crop is pre-irrigated with one spring irrigation.
- Growers can reduce the effect of waterlogging problems by only pre-irrigating a proportion of intended winter crop area.
- Barley is the most susceptible winter cereal to waterlogging, ideally the crop should be flooded and drained within 12 hours. Some varieties handle waterlogging better than others eg Gairdner.
- Yield in the absence of pre-irrigation following a cereal crop yield is restricted to 2.5-3.5 t/ha depending on rainfall. Therefore, pre-irrigation gives 1.0-1.5 t/ha extra yield in drier years.
- **Budget uses Murray Irrigation Area total variable water costs.**
- **For water costs in other areas, refer to the water prices section.**
- Machinery:** - Machinery costs include variable costs only for the tractor, implements and header.
- Contract harvesting does not include the cost of fuel.
- Labour:** - The labour required for machinery operations is 1.88 hr/ha.
- Using a labour cost of \$22/hr, an additional \$41/ha can be deducted from the budget.
- Economic note:** - These gross margins are only a guide. They do not include overhead costs or GST.
- Input and crop prices are correct at the time of writing (April 2012). Market uncertainty makes estimation of future pricing impractical.
- **Use your own figures and price assumptions to determine your own gross margin.**



Department of Primary Industries

WHEAT: ASW/AH1 (Flood Irrigated - Border Check / Direct Drilled)

Irrigated Winter - 2012

Murray Valley

1. GROSS MARGIN BUDGET:

INCOME:

3.50 tonnes/ha @ \$200 /t (on farm)

Standard Budget \$/ha	Your Budget \$/ha
\$700	

A. TOTAL INCOME \$/ha:

\$700	
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VARIABLE COSTS:

See following page for detail

Cultivation.....	\$0
Sowing.....	\$98
Fertiliser.....	\$188
Herbicide.....	\$49
Fungicide.....	\$19
Contract harvesting.....	\$59
Levies.....	\$7
Crop insurance.....	\$16
Irrigation.....	\$6
B. TOTAL VARIABLE COSTS \$/ha:	\$443

C. GROSS MARGIN (A-B) \$/ha:

\$257	
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D. GROSS MARGIN \$/ML:

\$206	
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SENSITIVITY TABLES

2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t	
2.00	-\$110	-\$71	-\$33	\$6	\$45	
2.50	-\$33	\$16	\$64	\$112	\$161	
3.00	\$45	\$103	\$161	\$219	\$277	
3.50	\$122	\$190	\$257	\$325	\$393	
4.00	\$196	\$273	\$351	\$428	\$505	
4.50	\$267	\$354	\$441	\$528	\$615	
5.00	\$339	\$435	\$532	\$629	\$725	

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER ML*:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ML)
	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t	
2.00	-\$88	-\$57	-\$26	\$5	\$36	
2.50	-\$26	\$13	\$51	\$90	\$129	
3.00	\$36	\$82	\$129	\$175	\$221	
3.50	\$98	\$152	\$206	\$260	\$314	
4.00	\$157	\$219	\$280	\$342	\$404	
4.50	\$214	\$283	\$353	\$423	\$492	
5.00	\$271	\$348	\$426	\$503	\$580	

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

WHEAT: ASW/AH1 (Flood Irrigated - Border Check / Direct Drilled)
Murray Valley
Irrigated Winter - 2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	Total Cost \$/ha
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Dec/Jan	Contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
spray Metsulfuron methyl (eg Ally)	with above				0.005kg/ha	\$66/kg	\$0.33	\$0.33
spray Triclopyr (eg Garlon)	with above				0.160 L/ha	\$20.30/L	\$3.25	\$3.25
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Feb	Contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
Pre-sowing weed control eg ground spray glyphosate 450	May	Contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
spray Trisulfuron (eg Logran)	with above				0.030kg/ha	\$64/kg	\$1.91	\$1.91
Sow	Apr/May	0.17	\$62.38	\$10.48	90kg/ha	\$0.97/kg	\$87.30	\$97.78
Apply starter fertiliser (<i>eg. DAP</i>)	with above				125kg/ha	\$0.760/kg	\$95.00	\$95.00
Topdress nitrogen fertiliser (<i>eg. broadcast urea</i>)	Jun/July	0.17	\$62.38	\$10.48	125kg/ha	\$0.662/kg	\$82.75	\$93.23
Spray Fungicide Stripe Rust (<i>eg. Triadimefon</i>)	Sept/Oct	contract		\$10.00	1.00 L/ha	\$9.00/L	\$8.00	\$19.00
Contract harvest	Nov/Dec	contract		\$49.42				\$49.42
Chaser Bin		0.22	\$45.05	\$9.91				\$9.91
Irrigation					1.25ML/ha	\$5.15/ML	\$6.44	\$6.44
Crop Levies					1.02% of on-farm value			\$7.11
Crop Insurance					2.280% of on-farm value			\$15.96

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

AGRONOMIC NOTES:

Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.

Always read chemical labels and follow directions carefully, as it is your legal responsibility to do so.

- Rotation:**
- This is the first crop following a break crop.
- Varieties**
- Refer to the "*Winter crop variety sowing guide 2012*", varieties are reviewed annually for suitability, disease resistance and quality characteristics. If using own seed, treat with a registered seed dressing. A germination test is recommended.
- Weed Control:**
- This budget includes a full summer weed control program to maximise stored moisture
 - A knock down herbicide may be required at sowing.
 - An additional broadleaf herbicide may also be required.
 - Refer to NSW DPI *Weed control in winter crops 2012* for alternate herbicides.
- Disease control:**
- Budget for at least one fungicide spray in the spring.
 - Preference is for varieties with Stripe Rust ratings MR - MS and above.
 - Total number of sprays required will depend on crop yield potential and seasonal conditions and Stripe Rust resistance rating of the variety.
- Fertiliser:**
- A soil test should be taken for determination of Phosphorus levels. Colwell P levels of less than 35mg/kg require higher starter fertiliser rates.
 - If Colwell P <15 mg/kg, and sowing after 7th May, increase fertiliser to 75 kg DAP/ha.
 - Topdressed urea in cropped paddocks by plane could cost additional \$16.00/ha to apply.
 - No more than 30 kg N/ha to be sown with the seed on normal row spacing.
- Irrigation:**
- The budget assumes a pre-watering in autumn of 1.5ML/ha
 - Budget uses 1 spring irrigation at 1.25ML/ha.
 - For spring irrigation timing ensure adequate moisture between head emergence and flowering.
 - Layouts should ensure that the crop can be drained within 15 hours of irrigation
 - **Budget uses Murray Irrigation Area total variable water costs only.**
 - **For water costs in other areas, refer to the water prices section.**
- Machinery:**
- Machinery costs include variable costs only for the tractor, implements and header.
 - Contract harvesting does not include the cost of fuel.
- Labour:**
- The labour required for machinery operations is 1.09 hr/ha.
 - Using a labour cost of \$22/hr, an additional \$24/ha can be deducted from the budget.
- Economic note:**
- These gross margins are only a guide. They do not include overhead costs or GST.
 - Input and crop prices are correct at the time of writing (April 2012). Market uncertainty makes estimation of future pricing impractical.
 - **Use your own figures and price assumptions to determine your own gross margin.**



OATEN HAY: (Flood Irrigated - Border Check / Conv. Sown)

Irrigated Winter - 2012

Murray Valley

1. GROSS MARGIN BUDGET:

INCOME:

11.80 tonnes/ha @ \$165.00 /t (on farm)

Standard Budget \$/ha	Your Budget \$/ha
\$1,947	

A. TOTAL INCOME \$/ha:

\$1,947	
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VARIABLE COSTS:

See following page for detail

Cultivation.....	\$73	
Sowing.....	\$108	
Fertiliser.....	\$225	
Herbicide.....	\$13	
Contract cutting, raking & baling.....	\$504	
Cartage.....	\$84	
Irrigation.....	\$10	
B. TOTAL VARIABLE COSTS \$/ha:	\$1,017	

C. GROSS MARGIN (A-B) \$/ha:

\$930	
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D. GROSS MARGIN \$/ML:

\$465	
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SENSITIVITY TABLES

2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$125 /t	\$145 /t	\$165 /t	\$185 /t	\$205 /t	
10.30	\$345	\$551	\$757	\$963	\$1169	
10.80	\$383	\$599	\$815	\$1031	\$1247	
11.30	\$420	\$646	\$872	\$1098	\$1324	
11.80	\$458	\$694	\$930	\$1166	\$1402	
12.30	\$495	\$741	\$987	\$1233	\$1479	
12.80	\$533	\$789	\$1045	\$1301	\$1557	
13.30	\$571	\$837	\$1103	\$1369	\$1635	

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER ML*:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ML)
	\$125 /t	\$145 /t	\$165 /t	\$185 /t	\$205 /t	
10.30	\$173	\$276	\$379	\$482	\$585	
10.80	\$191	\$299	\$407	\$515	\$623	
11.30	\$210	\$323	\$436	\$549	\$662	
11.80	\$229	\$347	\$465	\$583	\$701	
12.30	\$248	\$371	\$494	\$617	\$740	
12.80	\$266	\$394	\$522	\$650	\$778	
13.30	\$285	\$418	\$551	\$684	\$817	

OATEN HAY: (Flood Irrigated - Border Check / Conv. Sown)

Murray Valley

Irrigated Winter - 2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	Total Cost \$/ha
Rip banks	Nov/Dec	0.22	\$48.80	\$10.89				\$10.89
Disc plough	Dec/Jan	0.35	\$42.85	\$14.88				\$14.88
Scarify	Feb	0.17	\$45.05	\$7.71				\$7.71
Landplane or roll	Mar	0.17	\$45.05	\$7.71				\$7.71
Bank up		0.26	\$46.38	\$12.08				\$12.08
Scarify	Mar/Apr	0.17	\$45.05	\$7.71				\$7.71
Sow	Jun/Jul	0.17	\$62.38	\$10.48	130kg/ha	\$0.75/kg	\$97.50	\$107.98
Apply starter fertiliser (<i>eg. DAP</i>)		with above			125kg/ha	\$0.760/kg	\$95.00	\$95.00
Tail drains		0.26	\$46.38	\$12.08				\$12.08
Grass weed control (<i>eg. Boom spray chlorsulfuron</i>)	Jun	contract		\$10.00	0.02kg/ha	\$132.00/kg	\$2.64	\$12.64
Topdress nitrogen fertiliser (<i>eg. broadcast urea</i>)	Jun/Jul	0.17	\$62.38	\$10.48	180kg/ha	\$0.662/kg	\$119.16	\$129.64
Contract cut, rake, & bale	Oct/Nov	contract	16.82 bales/ha @		30.00 \$/bale		\$504.45	\$504.45
Irrigation					2.0ML/ha	\$5.15/ML	\$10.30	\$10.30
Cartage	Oct/Nov	contract	16.82 bales/ha @		5.00 \$/bale		\$84.08	\$84.08

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

AGRONOMIC NOTES:

Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.

Always read chemical labels and follow directions carefully, as it is your legal responsibility to do so.

Rotation:	<ul style="list-style-type: none">- This is the first crop following a cereal, subclover or lucerne. It requires a level seed bed, hence the need to roll or landplane operation.
Varieties:	<ul style="list-style-type: none">- Refer to the NSW DPI "<i>Winter crop variety sowing guide 2012</i>". Varieties are reviewed annually for disease resistance and quality characteristics- Select more than one variety with at least one from the early maturing group and another from mid or late group.
Weed Control:	<ul style="list-style-type: none">- An additional broadleaf herbicide may be required.- Apply chlorsulfuron at the 2 - 3 leaf stage of oats and check variety for chlorsulfuron sensitivity.
Fertiliser:	<ul style="list-style-type: none">- A higher rate of urea is applied to improve dry matter quality and quantity of production.- A split application of urea may improve hay quality, colour and reduce lodging.
Irrigation:	<ul style="list-style-type: none">- Schedule 2 spring irrigations (1ML/ha each).- *Budget uses Murray Irrigation Area total variable water costs only.- For water costs in other areas and districts, refer to the water prices section.
Risk:	<ul style="list-style-type: none">- The production of good quality hay involves significant weather risk.- Later sowing can reduce the risk of rain during conservation but may increase water use
Machinery:	<ul style="list-style-type: none">- Machinery costs include variable costs only for the tractor, implements and header.- Contract harvesting does not include the cost of fuel.
Bale Weights:	<ul style="list-style-type: none">- This budget uses large 8' x 4' x 3' (240cm x 20cm x 90cm) bales at 1.425 bale/t = 16.245 bales/ha
Labour:	<ul style="list-style-type: none">- The labour required for machinery operations is 2.43 hr/ha.- Using a labour cost of \$22/hr, an additional \$53/ha can be deducted from the budget.
Economic note:	<ul style="list-style-type: none">- These gross margins are only a guide. They do not include overhead costs or GST.- Input and crop prices are correct at the time of writing (April 2012). Market uncertainty makes estimation of future pricing impractical.- Use your own figures and price assumptions to determine your own gross margin.



Department of Primary Industries

OATS: GRAIN ONLY (Flood Irrigated - Contour Bay / Direct Drill) Irrigated Winter - 2012 Murray Valley

1. GROSS MARGIN BUDGET:

INCOME:

3.00 tonnes/ha @ \$140.00 /t (on farm)

Standard Budget \$/ha	Your Budget \$/ha
\$420	

A. TOTAL INCOME \$/ha:

\$420	
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VARIABLE COSTS:

See following page for detail

Cultivation.....	\$0	
Sowing.....	\$55	
Fertiliser.....	\$115	
Herbicide.....	\$42	
Contract harvesting.....	\$59	
Levies.....	\$4	
Crop insurance.....	\$10	
Irrigation.....	\$13	
B. TOTAL VARIABLE COSTS \$/ha:	\$299	

C. GROSS MARGIN (A-B) \$/ha:

\$121	
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D. GROSS MARGIN \$/ML:

\$48.60	
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SENSITIVITY TABLES

2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$100 /t	\$120 /t	\$140 /t	\$160 /t	\$180 /t	
1.50	-\$140	-\$111	-\$82	-\$53	-\$24	
2.00	-\$91	-\$53	-\$14	\$25	\$63	
2.50	-\$43	\$5	\$54	\$102	\$151	
3.00	\$5	\$63	\$121	\$180	\$238	
3.50	\$54	\$121	\$189	\$257	\$325	
4.00	\$99	\$176	\$253	\$331	\$408	
4.50	\$141	\$228	\$315	\$402	\$489	

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER ML*:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ML)
	\$100 /t	\$120 /t	\$140 /t	\$160 /t	\$180 /t	
1.50	-\$56	-\$44	-\$33	-\$21	-\$9	
2.00	-\$37	-\$21	-\$6	\$10	\$25	
2.50	-\$17	\$2	\$22	\$41	\$60	
3.00	\$2	\$25	\$49	\$72	\$95	
3.50	\$22	\$49	\$76	\$103	\$130	
4.00	\$39	\$70	\$101	\$132	\$163	
4.50	\$56	\$91	\$126	\$161	\$196	

OATS: GRAIN ONLY (Flood Irrigated - Contour Bay / Direct Drill)

Murray Valley

Irrigated Winter - 2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	Total Cost \$/ha
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Dec/Jan	Contract		10	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
spray LV Ester 680	with above				0.800 L/ha	\$9.45/L	\$7.56	\$7.56
spray Triclopyr (eg Garlon)	with above				0.160 L/ha	\$20.30/L	\$3.25	\$3.25
Pre-sowing weed control (Glyphosate)	April/May	contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
Sow	May	0.17	\$62.38	\$10.48	60kg/ha	\$0.75/kg	\$45.00	\$55.48
Apply starter fertiliser (eg. DAP)	with above				50kg/ha	\$0.760/kg	\$38.00	\$38.00
Topdress nitrogen fertiliser (eg. broadcast urea)	Jun/Jul	0.17	\$62.38	\$10.48	100kg/ha	\$0.662/kg	\$66.20	\$76.68
Spray Chlorsulfuron (eg Glean)	Jun/Jul				0.020kg/ha	132kg/ha	\$2.64	\$2.64
Contract harvest	Nov	contract		\$49.42				\$49.42
Chaser Bin		0.22	\$45.05	\$9.91				\$9.91
Irrigation					2.50ML/ha	\$5.15/ML	\$12.88	\$12.88
Crop Levies					1.02% of on-farm value			\$4.26
Crop Insurance					2.280% of on-farm value			\$9.58

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

AGRONOMIC NOTES:

Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.

Always read chemical labels and follow directions carefully, as it is your legal responsibility to do so.

- Rotation:** - Oats are often favoured on difficult soils due to their good seedling vigour.
- Varieties:** - Refer to the NSW DPI "*Winter crop variety sowing guide 2012*". Varieties are reviewed annually for disease resistance and quality characteristics
- Lodging often reduces yield potential of tall varieties.
- Weed Control:** - An additional broadleaf herbicide may be required.
- Apply chlorsulfuron at the 2 - 3 leaf stage of oats and check variety for chlorsulfuron sensitivity.
- Irrigation:** - This budget assumes a pre-watering in Autumn at 1.5ML/ha and 1 spring irrigation at 1.0ML/ha water use.
- **Budget uses Murray Irrigation Area total variable water costs only.**
- **For water costs in other areas and districts, refer to the water prices section.**
- Machinery:** - Machinery costs include variable costs only for the tractor, implements and header.
- Contract harvesting does not include the cost of fuel.
- Labour:** - The labour required for machinery operations is 2.42 hr/ha.
- Using a labour cost of \$22/hr, an additional \$53 /ha can be deducted from the budget.
- Economic note:** - These gross margins are only a guide. They do not include overhead costs or GST.
- Input and crop prices are correct at the time of writing (March 2012). Market uncertainty makes estimation of future pricing impractical.
- **Use your own figures and price assumptions to determine your own gross margin.**



Department of Primary Industries

CANOLA: (Flood Irrigated - Border Check / Conv. Sown)

Irrigated Winter - 2012

Murray Valley

1. GROSS MARGIN BUDGET:

INCOME:

2.50 tonnes/ha @ \$520 /t (on farm, 42% oil)

Standard Budget \$/ha	Your Budget \$/ha
\$1,300	

A. TOTAL INCOME \$/ha:

\$1,300	
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VARIABLE COSTS:

See following page for detail

Cultivation.....	\$28	
Sowing.....	\$68	
Fertiliser.....	\$280	
Herbicide.....	\$24	
Insecticide.....	\$21	
Contract windrowing.....	\$25	
Contract harvesting.....	\$84	
Levies.....	\$17	
Crop insurance.....	\$43	
Irrigation.....	\$13	
B. TOTAL VARIABLE COSTS \$/ha:	\$602	

C. GROSS MARGIN (A-B) \$/ha:

\$698	
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D. GROSS MARGIN \$/ML:

\$279	
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SENSITIVITY TABLES

2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$480 /t	\$500 /t	\$520 /t	\$540 /t	\$560 /t	
1.00	-\$79	-\$60	-\$41	-\$21	-\$2	
1.50	\$150	\$179	\$208	\$236	\$265	
2.00	\$379	\$417	\$456	\$494	\$532	
2.50	\$602	\$650	\$698	\$745	\$793	←
3.00	\$831	\$888	\$946	\$1003	\$1061	
3.50	\$1060	\$1127	\$1194	\$1261	\$1328	
4.00	\$1289	\$1365	\$1442	\$1518	\$1595	

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER ML*:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ML)
	\$480 /t	\$500 /t	\$520 /t	\$540 /t	\$560 /t	
1.00	-\$32	-\$24	-\$16	-\$9	-\$1	
1.50	\$60	\$72	\$83	\$95	\$106	
2.00	\$152	\$167	\$182	\$198	\$213	
2.50	\$241	\$260	\$279	\$298	\$317	←
3.00	\$332	\$355	\$378	\$401	\$424	
3.50	\$424	\$451	\$478	\$504	\$531	
4.00	\$516	\$546	\$577	\$607	\$638	

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

CANOLA: (Flood Irrigated - Border Check / Conv. Sown)

Murray Valley

Irrigated Winter - 2012

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	
Fallow broadleaf & grass weed control eg. ground spray glyphosate 450	Dec/Jan	Contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
Spray 2,4-D amine 300g/L eg. Surpass		with above			1.20 L/ha	\$5.97/L	\$7.16	\$7.16
Scarify	Mar/Apr	0.17	\$45.05	\$7.71				\$7.71
Grade	Mar/Apr	0.17	\$45.05	\$7.71				\$7.71
Pre-emergent weed control <i>(eg. boom spray trifluralin)</i> contract				\$10.00	1.70 L/ha	\$8.50/L	\$14.45	\$24.45
Sow	Apr/May	0.17	\$62.38	\$10.48	4kg/ha	\$14.50/kg	\$58.00	\$68.48
Apply starter fertiliser <i>(eg. DAP)</i>		with above			125kg/ha	\$0.760/kg	\$95.00	\$95.00
Tail drains		0.26	\$46.38	\$12.08				\$12.08
Topdress sulfur fertiliser <i>(eg. broadcast gypsum)</i>		0.05	\$41.38	\$2.23	1000kg/ha	\$0.056/kg	\$56.00	\$58.23
<i>Earthmite control</i> <i>(eg. boom spray bifenthrin)</i> May contract				\$10.00	0.10 L/ha	\$46.00/L	\$4.60	\$14.60
Apply nitrogen fertiliser <i>(eg. contract aerially apply urea)</i>	Jul	contract		27.00	150kg/ha	\$0.662/kg	\$99.30	\$126.30
Heliothis control <i>(eg. contract aerial spray alpha-cypermethrin)</i>	Sep/Oct	contract	(1 year in 3)	\$5.67	0.30 L/ha	\$7.95/L	\$0.80	\$6.46
Contract windrowing	Nov	contract		\$25.00				\$25.00
Contract harvest	Nov/Dec	contract		\$74.13				\$74.13
Chaser Bin		0.22	\$45.05	\$9.91				\$9.91
Irrigation					2.50ML/ha	\$5.15/ML	\$12.88	\$12.88
Crop Levies			\$1.50 /t	+	1.02% of on-farm value			\$16.95
Crop Insurance					3.27% of on-farm value			\$42.51

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

AGRONOMIC NOTES:

Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.

Always read chemical labels and follow directions carefully, as it is your legal responsibility to do so.

Varieties:	<ul style="list-style-type: none">- Refer to the NSW DPI "<i>Winter crop variety sowing guide 2012</i>". Varieties are reviewed annually for disease resistance and quality characteristics- When selecting a variety, maturity, blackleg resistance, yield, oil content, protein content and herbicide tolerance are the main characteristics to consider.- Mid-season varieties are generally suited.
Sowing Time:	<ul style="list-style-type: none">- Correct sowing time of 20th April to 20th May is crucial for profitable yields.- Later sowings run the risk of heat stress during flowering in the Spring.
Rotation:	<ul style="list-style-type: none">- Canola is best suited to high fertility paddocks free of hard pans, crusting and waterlogging.- Is the first crop following a pasture phase on a border check layout. If Canola does not follow a pasture phase, a minimum of 125kg of Urea should be applied for nutritional requirements.
Oil Content:	<ul style="list-style-type: none">- An oil bonus/discount of 1.5% of price is applied for every 1% above/below 42% oil content.
Fertiliser:	<ul style="list-style-type: none">- Due to canola's high sulphur requirement, gypsum is applied 1 year in 5.
Weed Control:	<ul style="list-style-type: none">- Herbicides are boomsprayed in a dry year and aerial sprayed in a wet year.- Refer to NSW DPI "<i>Weed control in winter crops 2012</i>" for alternate herbicides.
Pest Control:	<ul style="list-style-type: none">- The critical stage for pest control is during emergence and early seedling growth, close crop monitoring is essential to identify potential problems early and treat if required.
Irrigation:	<ul style="list-style-type: none">- The budget assumes a pre-watering in autumn at 1.5ML/ha water use and 1 spring irrigation at 1.0ML/ha- Schedule spring irrigations according to plant water use.- Canola is quite prone to waterlogging, so frequent irrigation is only suited to well drained fields.- Budget uses Murray Irrigation Area total variable water costs.
Windrowing:	<ul style="list-style-type: none">- Most crops are windrowed, instead of direct headed to avoid shattering.
Machinery:	<ul style="list-style-type: none">- Machinery costs include variable costs only for the tractor, implements and header.- Contract harvesting does not include the cost of fuel.
Labour:	<ul style="list-style-type: none">- The labour required for machinery operations is 1.09 hr/ha.- Using a labour cost of \$22/hr, an additional\$24/ha can be deducted from the budget.
Economic note:	<ul style="list-style-type: none">- These gross margins are only a guide. They do not include overhead costs or GST.- Input and crop prices are correct at the time of writing (April 2012). Market uncertainty makes estimation of future pricing impractical.- Use your own figures and price assumptions to determine your own gross margin.



WHEAT: ASW (Contour Layout - Pre-irrigation / Direct Drill)

Irrigated Winter - 2012

Murray Valley

1. GROSS MARGIN BUDGET:

INCOME:

4.00 tonnes/ha @ \$200 /t (on farm)

Standard Budget \$/ha	Your Budget \$/ha
\$800	

A. TOTAL INCOME \$/ha:

\$800	
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VARIABLE COSTS:

See following page for detail

Cultivation.....	\$0	
Sowing.....	\$107	
Fertiliser.....	\$188	
Herbicide.....	\$49	
Fungicide.....	\$20	
Irrigation.....	\$13	
Contract harvesting.....	\$63	
Levies.....	\$8	
Crop insurance.....	\$18	
B. TOTAL VARIABLE COSTS \$/ha:	\$466	

C. GROSS MARGIN (A-B) \$/ha:

\$334	
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D. GROSS MARGIN \$/ML:

\$134	
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SENSITIVITY TABLES

2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t	
2.50	-\$49	-\$1	\$47	\$96	\$144	
3.00	\$28	\$86	\$144	\$202	\$260	
3.50	\$105	\$173	\$241	\$308	\$376	
4.00	\$179	\$257	\$334	\$411	\$489	←
4.50	\$251	\$338	\$425	\$512	\$599	
5.00	\$322	\$419	\$515	\$612	\$709	
5.50	\$393	\$500	\$606	\$712	\$819	

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER ML:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t
2.00	-\$20	\$0	\$19	\$38	\$58
2.50	\$11	\$34	\$58	\$81	\$104
3.00	\$42	\$69	\$96	\$123	\$150
3.50	\$72	\$103	\$134	\$165	\$195
4.00	\$100	\$135	\$170	\$205	\$239
4.50	\$129	\$167	\$206	\$245	\$283
5.00	\$157	\$200	\$242	\$285	\$327

WHEAT: ASW (Contour Layout - Pre-irrigation / Direct Drill)

Murray Valley

Irrigated Winter - 2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	Total Cost \$/ha
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Dec/Jan	contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
spray Metsulfuron methyl (eg Ally)	with above				0.005kg/ha	\$66/kg	\$0.33	\$0.33
spray Triclopyr (eg Garlon)	with above				0.16 L/ha	\$20.30/L	\$3.25	\$3.25
Fallow broadleaf and grass weed control eg ground spray glyphosate 450	Feb	contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
Pre-sowing weed control eg ground spray glyphosate 450	May / Hune	contract		\$10.00	1.00 L/ha	\$4.42/L	\$4.42	\$14.42
spray Trisulfuron (eg Logran)	with above				0.030kg/ha	\$64/kg	\$1.91	\$1.91
Sow	May/June/July	0.17	\$62.38	\$10.48	100kg/ha	\$0.97/kg	\$97.00	\$107.48
Apply starter fertiliser (eg. DAP)		with above			125kg/ha	\$0.760/kg	\$95.00	\$95.00
Fungicide treatment eg flutriafol (Impact ®)	April/June	with above			0.22 L/ha	\$23.00/L	\$5.06	\$5.06
Topdress nitrogen fertiliser (eg. broadcast urea)	July / Aug	0.17	\$62.38	\$10.48	125kg/ha	\$0.662/kg	\$82.75	\$93.23
Stripe Rust control (eg. Triadimefon)	July / Oct	contract		\$10.00	0.50 L/ha	\$9.00/L	\$4.50	\$14.50
Irrigation	April/Sept				2.5ML/ha	\$5.15/ML	\$12.88	\$12.88
Contract harvest	Nov/Dec	contract		\$52.94				\$52.94
Chaser Bin		0.22	\$45.05	\$9.91				\$9.91
Crop Levies					1.02%	of on-farm value		\$8.12
Crop Insurance					2.280%	of on-farm value		\$18.24

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

AGRONOMIC NOTES:

Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.

Always read chemical labels and follow directions carefully, as it is your legal responsibility to do so.

Cropcheck:	<ul style="list-style-type: none">- Monitor and record crop performance. Key checks include establishment, weeds, insects, disease and grain fill.
Rotation:	<ul style="list-style-type: none">- This is the first crop following a break crop
Varieties:	<ul style="list-style-type: none">- Refer to the NSW DPI "<i>Winter crop variety sowing guide 2012</i>". Varieties are reviewed annually for disease resistance and quality characteristics- If using own seed, treat with a registered seed dressing. A germination test is recommended.
Yields:	<ul style="list-style-type: none">- Landformed contour bays yield 0.5 to 1t/ha higher, especially in wet years.- Western areas achieve 0.5 t/ha lower yields due to lower rainfall. Higher yield can be obtained with spring irrigation where the risk of waterlogging is lower.
Fertiliser:	<ul style="list-style-type: none">- A soil test should be taken for determination of phosphorus levels. Colwell P levels of less than 35 mg/kg require higher starter fertiliser rates.- If Colwell P <15 mg/kg, and sowing after 7th May, increase fertiliser to 75 kg DAP/ha.- Topdressed urea in cropped paddocks by plane could cost additional \$16.00/ha to apply.- No more than 30 kg N/ha to be sown with the seed on normal row spacing.
Disease control:	<ul style="list-style-type: none">- Budget for a stripe rust fertiliser dressing and at least one fungicide spray in the spring.- Preference is for varieties with Stripe Rust ratings MR - MS and above.- Total number of sprays required will depend on crop yield potential and seasonal conditions.
Weed Control:	<ul style="list-style-type: none">- This budget includes a full summer weed control program to maximise stored moisture- An additional broadleaf herbicide may be required if wireweed and toadrush are a problem.- Annual Phalaris control maybe required for crops sown on the grey soils- If wheat is undersown to clover select a legume safe herbicide.
Irrigation:	<ul style="list-style-type: none">- This budget assumes a pre-watering in autumn at 1.5ML/ha water use.- Budget uses Murray Irrigation Area total variable costs of water only.- For water costs in other areas, refer to the water prices section.
Machinery:	<ul style="list-style-type: none">- Machinery costs include variable costs only for the tractor, implements and header.- Contract harvesting does not include the cost of fuel.
Labour:	<ul style="list-style-type: none">- The labour required for machinery operations is 1.88 hr/ha.- Using a labour cost of \$22/hr, an additional \$41/ha can be deducted from the budget.
Economic note:	<ul style="list-style-type: none">- These gross margins are only a guide. They do not include overhead costs or GST.- Input and crop prices are correct at the time of writing (April 2012). Market uncertainty makes estimation of future pricing impractical.- Use your own figures and price assumptions to determine your own gross margin.