Description	Rotational Grazing, Reduce Winter Feed Extend grazing season through rotational grazing.	Rotational Grazing, Reduce Winter Feed, BCCAF Extend grazing season through rotational grazing with cost-share with the BC Climate Agri-Solutions Fund (BCCAF).	Rotational Grazing, Reduce Winter Feed, BCCAF, Increased Weaning Weight Extend grazing season through rotational grazing with cost-share with the BC Climate Agri-Solutions Fund (BCCAF). Increase weaning weight through adding an off-source watering system.
Assumptions	 Invest \$13,000 in a portable electric fencing system in the first year Invest \$17,954 in a solar-powered pump and shallow pipeline watering system with existing water source Watering system maintenance cost at \$100/year Improve stocking rate by 10% Winter feeding days reduce by 20 days from 165 to 145 days Add 63 unpaid family labour hours (additional labour for rotational grazing, partly offset by reduced labour required for winter feed) Fuel cost for winter feeding reduce by \$558 per year Assume off-source water access before adding water pipelines Calf weaning weights are unaffected by grazing method Surplus forage production stock up for carry-over 	 Invest \$13,000 in a portable electric fencing system in the first year Invest \$17,954 in a solar-powered pump and shallow pipeline watering system with existing water source Watering system maintenance cost at \$100/year Improve stocking rate by 10% Winter feeding days reduce by 20 days from 165 to 145 days Add 63 unpaid family labour hours (additional labour for rotational grazing, partly offset by reduced labour required for winter feed) Fuel cost for winter feeding reduce by \$558 per year Assume off-source water access before adding water pipelines Calf weaning weights are unaffected by grazing method Surplus forage production stock up for carry-over \$20,000 funding from BCCAF (70% cost-share within maximum of \$20,000)* 	 Invest \$13,000 in a portable electric fencing system in the first year Invest \$17,954 in a solar-powered pump and shallow pipeline watering system with existing water source \$20,000 funding from BCCAF (70% cost-share within maximum of \$20,000)* Watering system maintenance cost at \$100/year Improve stocking rate by 10% Winter feeding days reduce by 20 days from 165 to 145 days Add 63 unpaid family labour hours (additional labour for rotational grazing, partly offset by reduced labour required for winter feed) Fuel cost for winter feeding reduce by \$558 per year Calf weaning weights are unaffected by grazing method Surplus forage production stock up for carry-over Assume cattle had direct water access before adding water pipelines Additional average daily gain of 0.1 lb per calf Heifer weaning weight up from 500 to 520 lbs, steer weaning weight up from 550 to 570 lb Price slides due to heavier weaning weights are -\$1.18/cwt for heifer calves, -\$2.68/cwt for steer calves (Based on BC price slides from 5-600lb to 6-700lb categories) Backgrounded heifers sell weight up from 863 to 882 lbs, steers up from 971 to 991 lbs Price slides due to heavier sale weights are -\$2.27/cwt for heifers, no change for steers (Based on BC price slides from8-900lb to 900lb+ categories, adjusted by additional weight gains)

^{*}Assumption only. Actual costs may vary from project to project, depending on individual circumstances. More detailed information will be required in the actual application process to accurately determine eligibility. https://bccaf.ca/





	Rotational Grazing, Reduce Winter Feed	Rotational Grazing, Reduce Winter Feed, BCCAF	Rotational Grazing, Reduce Winter Feed, BCCAF, Increased Weaning Weight	
Trade-Off Considerations	 Additional labour for rotational grazing Upfront capital or equity position required to invest in new fencing and watering system \$/head cost decreases with increasing herd size Stocking rate improvements vary by location, weather, soil type, age of stand, previous grazing management, etc. Infrastructure restrictions on rented land 	 Additional labour for rotational grazing Upfront capital or equity position required to invest in new fencing and watering system \$/head cost decreases with increasing herd size Stocking rate improvements vary by location, weather, soil type, age of stand, previous grazing management etc. Infrastructure restrictions on rented land 	 Additional labour for rotational grazing Upfront capital or equity position required to invest in new fencing system \$/head cost decreases with increasing herd size Stocking rate improvements vary by location, weather, soil type, age of stand, previous grazing management, etc. Infrastructure restrictions on rented land Cattle price per lb may decrease due to price slide on heavier sale weight 	
	5-year average vs. baseline year*			
Estimated Change at Whole	Farm Level (\$/year)			
Net Income	-\$293	+\$4,452	+\$7,996	
Net Cash Farm Income	-\$294	+\$4,450	+\$7,993	
Estimated Change at Cow-calf Enterprise (\$/cow)				
Short-term Profits	-\$3	+\$30	+\$56	
Medium-term Profits	-\$3	+\$30	+\$56	
Long-term Profits	\$0	+\$30	+\$53	





	Calving Distribution	Buy Bred Heifers
Description	Increase weaning weight by adjusting calving distribution to 70%-20%-10% over five years.	Change from raising to buying bred heifers
Assumptions	 Change calving distribution 70%-20%-10% in the first three cycles over five years Heifer weaning weight increase from 500 lb to 512 lb over five years Steer weaning weight increase from 550 lb to 564 lb over five years Price slides due to heavier sell weights are -\$6/cwt for heifers, and -\$14/cwt for steers going from 5-600 lb to 6-700 lb (BC feeder cattle prices, Oct 2022) Heifer prices change from \$1011/head to \$1032/head, steer prices change from \$1317/head to \$1348/head over five years with lower price per lb but more lbs per head Backgrounded heifer end weight increases from 863 lb to 875 lb over five years Backgrounded steers end weights for up from 971 lb to 985 lb Backgrounded steer price steady with baseline, while price slide for heifers is -\$12/cwt going from 8-900 lb to 900+lb categories) Backgrounded heifer prices change from \$177.6/cwt to \$176.2/cwt over five years 	 Percent of female calves going to finishing enterprise change from 38% to 50% Percent of heifer calves sold as weaners change from 38% to 50% Heifer number in the backgrounding enterprise up from 23 to 30 head Heifer sold as weaner up from 23 to 30 head Purchase 14 bred heifers Bred heifer at \$2735/head (2023 avg) Reduce total vet & med cost by 10% Reduce bull number by 1 head
Trade-Off Considerations	 Cattle price per lb may decrease due to price slide on heavier sale weight. Calving seasons can be shortened by pulling the bulls five days earlier each year, this slow change avoids a drop in conception rates. Options also include front loading the calving season can be done by breeding heifers 2-4 weeks ahead of the cow herd, which will require additional labour. Other options that require a cash investment include heat synchronizing, artificial insemination and adjusting the cow:bull ratio. 	 Have less control over the genetics of the herd Purchased heifers may not be adapted to the ranch environment





	Calving Distribution	Buy Bred Heifers		
	5-year average vs. baseline year**			
Estimated Change at Whole Farm Level (\$/year)				
Net Income	+\$4,181	-\$21,229		
Net Cash Farm Income	+\$4,117	-\$21,229		
Short-term Profits	+\$23	-\$171		
Medium-term Profits	+\$23	-\$170		
Long-term Profits	+\$28	-\$154		

^{**} Changes in profitability come from the practice change as well as debt servicing

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