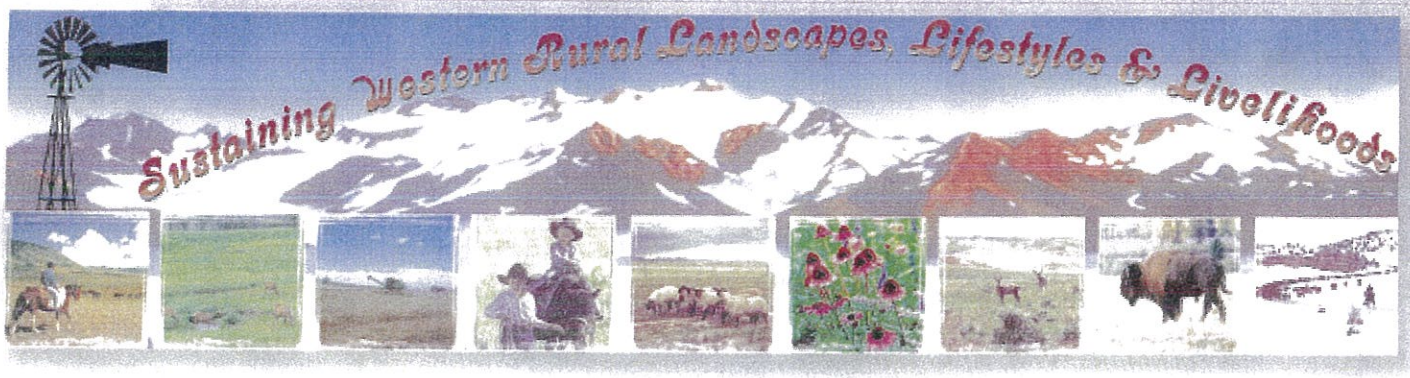

AGRICULTURAL ENTERPRISE DIVERSIFICATION RESOURCE GUIDE

Wyoming
BUSINESS COUNCIL

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To Whom It May Concern:

The *Sustaining Western Rural Landscapes, Lifestyles and Livelihoods* partnership completed the comprehensive agricultural diversification resource guide as a valuable tool in assisting professionals in delivering technical assistance to agricultural producers as they evaluate their current operations and research the feasibility of diversifying.

The information, at first glance, may look overwhelming, but is divided into the following sections:

- Foreword
- Introduction to Agricultural Enterprise Diversification
- Enterprise Assessment
- Enterprise Feasibility
- Enterprise Implementation (Business Planning, Legal, Finance, Marketing, Human Resources, Natural Resources and Community)

If you would like further information on how to best use this guide please don't hesitate to contact me at the following address. In addition we have access to professionals who can assist agricultural producers develop an agricultural diversification strategy, so please don't hesitate to contact me.

Sincerely,

Cindy Garretson-Weibel

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A. General information

The relationship between natural resource stewardship and the success of traditional agricultural businesses has been acknowledged and taken into account by many generations of farmers and ranchers. Recall that enterprise diversification involves the use of resources, including natural, in more than one enterprise. Given this framework, it is difficult today to imagine an alternative agricultural enterprise that is not somehow tied to the land.

Whether the alternative enterprise is based on specialty crops, non-traditional livestock, hunting, or recreation, its potential success will depend on the people on that land exercising care in the management and use of the resources of that land. Review the Resource Inventory (Section III) for natural resources that could either be incorporated into existing enterprises or become the basis for a new enterprise. "Poor" resource conditions may point to obstacles that need to be overcome for an enterprise to be successful. On the other hand, "good" resource conditions may indicate opportunities for profitable new enterprises.

For example, if the chosen enterprise is service-based and involves people in direct contact with the land, the expectations are for shining examples of natural resource stewardship rather than obvious signs of neglect or abuse. Landscape aesthetics, something often not considered in traditional agricultural production, are also valued by potential recreationists on the land unit. This translates into a quality experience, and the potential for a repeat customer. So, sites that may detract from positive visitor experiences, like erosion or old dumping sites, should be addressed.

If the selected enterprise is product production-based, and relied on natural resources, then it is really no different than producing a traditional commodity. Excessive soil erosion reduces production potential of alternative crops, and poor grazing practices can reduce the potential for alternative livestock production or for maintaining key habitat for a wildlife population that is marketable.

It then makes sense, at least in part, that the economical sustainability of a diversified agricultural enterprise is dependent upon the ecological sustainability of the same land unit. It can be thought of as a symbiotic relationship because the care and wise use of the natural resources will help perpetuate the success of the business. Conversely, the careful management of the business can earn the reinvestment capital necessary for enhancing and maintaining the natural resources.

Many diversified ranch operations require a different approach to natural resource management. Management of the general operation may need to be adjusted around desired products and activities. For example, a pasture may need to be left ungrazed during peak wildflower bloom, a riparian corridor could be managed for birding, and an excellent hunting spot may need protection from other uses in the fall.

There are a multitude of factors that may need to be considered in an agribusiness enterprise. Some of the common ones are:

B. Access

Access will be an important consideration for many diversified enterprises. Some producers are very tolerant of visitors, while others do not want to contend with strangers. If the choice is to engage in a recreational enterprise, whether by fee hunting, bird watching or trail riding, people who are not familiar with the property will not be using it. Let them know what is expected of them, in terms of closing gates, staying on designated trails, and not littering. Explain how neglect of these things affects the other natural resources. By informing visitors of the kind and extent of limitations such as these, they will likely be more conscientious of the ranch and its operation.

Access can be managed in a number of ways. The landowner can limit the number of visitors, when they visit, which areas they can use, how they can use those areas, and the duration of the visit.

C. Aesthetics

Producers may need to take a step back and assess the ranch from an aesthetic point of view, identifying the best views on the ranch, noting where noxious weeds are, or locating quiet spots in the shade for reflection. Many guests may not be accustomed to what a "real, working ranch" looks like. They will have their own set of ideas and expectations, often based on what they have seen in the movies, and what they have been taught in school and have seen in the media about the environment.

Preparation for guests includes: healing erosion sites, laying out trails to take advantage of the most spectacular views, and concealing improvements, like stock water developments, on the far side of a hill or in the timber.

D. Noxious weeds

This is a growing concern across much of the West. Vehicles driven off-road are an excellent vector for spreading noxious weed seed from one location to another. What can be done? The producer can require guests to wash their vehicle in town prior to arriving at the ranch, or they might provide a car washing facility on site at the ranch. The producer could also arrange to pick up the guests at a pre-determined location to avoid the potential spread of weeds.

What about guests that want to bring their own horses? Have they been feeding weed-free hay, or have they been grazing weed-free pastures? The producer could suggest that the guests feed weed-free hay to their horses for at least a week prior to visiting. Better yet, the producer could provide all of the horses for the guests during their stay, and change higher rates.

A good education program is essential for noxious weed management. The producer can develop a packet on noxious weed information and send it to all guests prior to their visit.

E. All terrain vehicle /off-road vehicle use

The producer will have to decide if they will allow ATV and/or ORV use on the land unit. Many rangelands are fragile, and thus, susceptible to erosion from ATV/ORV use. The producer can manage these impacts by limiting the use to designated trails and roads, and at times of the year when soils are less erodible. Require visitors to use designated stream crossings where there are bridges or the stream channel has been armored.

ATV/ORV traffic can also affect animal distributions, both domestic and wild. Use of these vehicles should be managed to avoid displacement, or prevention of use, of animals in desired locations during times of the year when animal presence is a priority.

F. Waste products

Many visitors have a heightened awareness of environmental stewardship, and consequently, have related expectations. Old dumping sites should be rehabilitated. Some producers have also installed septic tanks and outhouses at designated camping sites to better manage waste. This has proven to be a favorable practice with their paying guests.

Another potential consideration may be with fuel dispensing sites on the farm or ranch. There may be patches of soil with fuel or waste oil spills that could be removed and properly disposed. Many farms and ranches are now installing fuel-dispensing facilities that are completely contained within a concrete apron and pad.

G. Livestock grazing

Livestock grazing is a long-standing tradition on many western ranches. It is also one of the most contentious issues related to ranching because some people have differing viewpoints as to the impacts of grazing on other resources. Producers should, at the very least, be aware of this perception. While many guests may not know what "healthy" rangeland looks like, they

do have a perception of what "unhealthy" rangeland looks like. Management strategies should be implemented to move plant communities to more desirable compositions, to reduce and/or heal erosion, and to improve any other undesirable conditions. Proper grazing management helps maintain healthy rangeland and can serve as a tool for educating visitors as to the positive relationship that often occurs between grazing animals and plant communities.

Many producers are not familiar with alternative, non-traditional species of livestock, such as yaks, bison, elk, and camels. There are several factors that are important to consider in the context of natural resources stewardship. Some of these include forage preferences, distribution patterns, grazing and social behaviors, and water needs, all of which may be unique to these other types of livestock.

For recreational enterprises, some producers build corrals at designated camping or picnic sites to limit the impacts of grazing horses to a small, designated area. Hay is stock-piled and fed at these locations. This keeps the *visua*l impact and *real* impact of the grazing to a minimal area.

Others may choose to limit the access of visitors only to those areas that exhibit the highest degree of resource stewardship, while other areas are being improved as financial and other resources permit.

H. Wildlife/fisheries

Fisheries and wildlife are the basis for many diversified ranch enterprises across the West. Some producers opt to lease these resources to outfitters or sportsmen's clubs. Others choose to operate a fisheries or wildlife-based enterprise themselves. These can range from simple access fees to full-fledged guided operations with all amenities provided.

Much can be done to develop, enhance, and mange habitats for target species. Producers can also manage for trophy development or to reduce wildlife depredation impacts to other priority resources. Some producers

find it beneficial to link with adjoining landowners to achieve desired trophy and/or population objectives for target species.

I. Conservation practices

The natural resource professional can assist the producer in developing strategies for addressing natural resource concerns and optimizing opportunities. Conservation practices are excellent tools that are available for accomplishing these types of objectives.

A conservation practice is a specific treatment, such as a structural or vegetative measure, or management technique, commonly used to meet specific needs in planning and implementing conservation, for which standards and specifications have been developed. A diverse array of conservation practices are contained with the USDA-NRCS Field Office Technical Guide, which is found in each NRCS Field Office.

For example, if the producer is interested in a recreational enterprise, then he or she may be interested in a Recreation Trail and Walkway (code 568) or a Windbreak (code 380) adjacent to a campsite or lodging facility. Or, if the producer was interested in a fee hunting or fishing operation, then perhaps Streambank and Shoreline Protection (code 580) and Wetland Wildlife Habitat Management (code 644) would be desired.

Following the list of resources are the lists of NRCS Conservation Practices and 2003 practice component costs to use in evaluating enterprise feasibility and for planning conservation improvements to farm and ranch operations.

J. Resources

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USDA-NRCS Field Office Technical Guide
- can be accessed at all USDA Service Centers and NRCS Field Offices

USDA-NRCS National Range and Pasture Handbook. 1997.
- can be accessed at all USDA Service Centers and NRCS Field Offices

USDA-CSREES Cooperative Extension Service publications
- a list of natural resource publications for Wyoming, Colorado, Utah, Idaho, and Montana can be found in the Resources Section (VI) of this guide.

Practice (Unit)	Discipline	Date	Code
Access Road (Ft.)	Engineering	Jan-89	560
Alley Cropping (Ac.)	Agronomy	Jun-98	311
Animal Trails and Walkways (Ft.)	Eng/Range	Sep-98	575
Bedding (Ac.)	Engineering	Jan-89	310
Brush Management (Ac.)	Range	Jun-96	314
Channel Vegetation (Ac.)	Agronomy	Oct-77	322
Chiseling and Subsoiling (Ac.)	Agronomy	Jun-96	324
Clearing and Snagging (Ft.)	Engineering	Jan-89	326
Commercial Fishponds (Ac.)	Biology	Jan-89	397
Composting Facility (No.)	Agron/Eng	Jan-89	317
Conservation Cover (Ac.)	Agronomy	Jun-96	327
Conservation Crop Rotation (Ac.)	Agronomy	Jun-96	328
Constructed Wetland (Ac.)	Eng/Bio	Aug-98	656
Contour Farming (Ac.)	Agronomy	Jun-96	330
Controlled Drainage (Ac.)	Engineering	Dec-90	335
Covered Anacrobic lagoon (Interim) (No.)	Engineering	Jan-89	360
Cover and Green Manure Crop (Ac.)	Agronomy	Jun-96	340
Critical Area Planting (Ac.)	Agronomy	Jun-96	342
Cross Wind Ridges (Ac.)	Agronomy	Jun-96	589A
Cross Wind Stripcropping (Ac.)	Agronomy	Jun-96	589B
Cross Wind Trap Strips (Ac.)	Agronomy	Jun-96	589C
Dam, Diversion (No.)	Engineering	Jan-89	348
Dam, Floodwater Retarding (No. and Ac.-Ft.)	Engineering	Jan-89	402
Dam, Multiple-Purpose (No.)	Engineering	Jan-89	349
Dike (Ft.)	Engineering	Jan-89	356
Diversion (Ft.)	Engineering	Feb-95	362
Early Successional Habitat Development/Mgt (Ac.)	Biology	Aug-98	647
Fence (Ft.)	Range	Jun-96	382
Field Border (Ft.)	Biology	Jan-89	386
Filter Strip (Ac.)	Engineering	Jan-89	393
Firebreak (Ft.)	Forestry	Jun-94	394
Fish Raceway or Tank (Ft.) or (Ft^3)	Biology	Jan-89	398
Fish Stream Improvement (Ft.)	Biology	Jan-89	395
Fishpond Management (No.)	Biology	Jan-89	399
Floodwater Diversion (Ft.)	Engineering	Jan-89	400
Floodway (Ft.)	Engineering	Jan-89	404
Forage Harvest Management (Ac)	Agronomy	Jan-97	511
Forest Harvest Trails & Landings (Ac.)	Forestry	May-96	655
Forest Stand Improvement (Ac.)	Forestry	Jun-94	490
Forest Site Preparation (Ac.)	Forestry	Jun-94	490
Grade Stabilization Structure (No.)	Engineering	Oct-85	410
Grassed Waterway (Ac)	Agron/Eng	Oct-85	412
Grazing Land Mechanical Treatment (Ac.)	Range	Jun-96	548
Hedgerow Planting (Ft.)	Biology	Oct-77	422
Heavy Use Area Protection (Ac.)	Engineering	Jan-89	561

Practice (Unit)	Discipline	Date	Code
Herbaceous Wind Barriers (Ft.)	Agronomy	Jun-96	422A
Hillside Ditch (Ft.)	Engineering	Jan-89	423
Irrigation Canal or Lateral (Ft.)	Engineering	Jan-89	320
Irrigation Field Ditch (Ft.)	Engineering	Jan-89	388
Irrigation Land Leveling (Ac.)	Engineering	Jan-89	464
Irrigation Pit or Regulating Reservoir (No.)			
Irrigation Pit	Engineering	Jan-89	552-A
Regulating Reservoir	Engineering	Jan-89	552-B
Irrigation Storage Reservoir (No. & Ac. Ft.)	Engineering	Jan-89	436
Irrigation System (No. & Ac.)			
Sprinkler	Engineering	Jan-89	442
Surface and Subsurface	Engineering	Jan-89	443
Trickle	Engineering	Jan-89	441
Irrigation System, Tailwater Recovery (No.)	Engineering	Jan-89	447
Irrigation Water Conveyance (Ft.)	Engineering		
- Ditch & Canal Lining			
Nonreinforced Concrete		Jan-89	428-A
Flexible Membrane		Jan-89	428-B
Galvanized Steel		Jan-89	428-C
- Pipeline			
Aluminum Tubing		Jan-89	430-AA
Asbestos-Cement		Jan-89	430-BB
Nonreinforced Concrete		Jan-89	430-CC
High-Pressure, Undergound, Plastic		Jan-89	430-DD
Low-Pressure, Underground, Plastic		Jan-89	430-EE
Steel		Jan-89	430-FF
Reinforced Plastic Mortar		Jan-89	430-GG
Rigid Gated		Jan-89	430-HH
Corrugated Metal (Interim)		Jan-83	430-II-1
Corrugated Metal, Ribbed or Profile Wall, Thermoplastic (Interim)		Jan-93	430-JJ-1
Irrigation Water Management (Ac.)	Engineering	Jan-89	449
Land Clearing (Ac.)	Engineering	Jan-89	460
Land Reclamation	Engineering		
Fire Control (No.)		Oct-88	451
Shaft & Adit Closing (No.)		Oct-88	452
Landslide Treatment (No. & Ac.)		Oct-88	453
Subsidence Treatment (Ac.)		Oct-88	454
Toxic Discharge Control (No.)		Oct-88	455
Highwall Treatment (No. & Ft.)		Oct-88	456
Land Reconstruction, Abandoned Mined Land (Ac.)	Engineering	Jun-96	543
Land Reconstruction, Currently Mined land (Ac.)	Engineering	Jun-84	544
Land Smoothing (Ac.)	Engineering	Jan-89	466
Lined Waterway or Outlet (Ft.)	Engineering	Jan-89	468
Manure Transfer (No.)	Engineering	Jul-97	634
Mechanical Forage Harvesting (Ac.)	Agronomy	Jun-96	WY-XX
Mole Drain (Ft.)	Engineering	Jan-89	482
Mulching (Ac.)	Agronomy	Jun-96	484

Practice (Unit)	Discipline	Date	Code
Nutrient Management (Ac.)	Agronomy	Jun-96	590
Obstruction Removal (Ac.)	Engineering	Jan-89	500
Open Channel (Ft.)	Engineering	Jan-89	582
Pasture & Hay Planting (Ac.)	Agronomy	Jun-96	512
Pest Management (Ac.)	Agronomy	Jun-96	595
Pipeline (Ft.)	Engineering	Jan-89	516
Pond (No.)	Engineering	Jan-89	378
Pond Sealing or Lining (No.)	Engineering		
Flexible Membrane		Jan-89	521 -A
Soil Dispersant		Jan-89	521 -B
Bentonite Sealant		Jan-89	521 -C
Catonionic Emulsion-Waterborne Searlant		Jan-89	521-D
Asphalt-Sealed Fabric Liner		Jan-89	521-E
Precision Land Forming (Ac.)	Engineering	Jan-89	462
Prescribed Burning (Ac.)	Forestry	Jun-96	338
Prescribed Grazing (Ac.)	Range	Jun-96	528A
Pumped Well Drain (No.)	Engineering	Oct-88	532
Pumping Plant for Water Control (No.)	Engineering	Jan-89	533
Range Planting (Ac.)	Range	Jun-96	550
Recreation Area Improvement (Ac.)	Forestry	Jan-89	562
Recreation Land Grading and Shaping (Ac.)	Engineering	Jan-89	566
Recreation Trail & Walkway (Ft.)	Engineering	Jan-89	568
Regulating Water in Drainage Systems (Ac.)	Engineering	Jan-89	554
Residue Management Seasonal (Ac.)	Agronomy	Jun-96	344
Residue Management, Mulch-till (Ac.)	Agronomy	Jun-96	329B
Residue Management, No-till & Strip till (Ac.)	Agronomy	Jun-96	329A
Residue Management, Ridge-till (Ac.)	Agronomy	Jun-96	329C
Restoration & Mgmnt of Declining Habitats (Ac.)	Biology	Aug-98	643
Riparian Forest Buffer (Ac.)	Bio/Forestry	May-96	391
Rock Barrier (Ft.)	Engineering	Jan-89	555
Roof Runoff Management (No.)	Engineering	Jan-89	558
Row Arrangement (Ac.)	Engineering	Jan-89	557
Runoff Management System (No. & Ac.)	Engineering	Jan-89	570
Sediment Basin (No.)	Engineering	Feb-95	350
Shallow Water Management for Wildlife (Ac.)	Biology	Aug-98	646
Snow Harvesting (Ft.)	Engineering	Jul-92	100
Soil Salinity Management, Non-Irrigated (Ac.)	Engineering	Oct-88	571
Spoil Spreading (Ft.)	Engineering	Jan-89	572
Spring Development (No.)	Engineering	Jan-89	574
Stream Channel Stabilization (Ft.)	Engineering	Jan-89	584
Streambank & Shoreline Protection (Ft.)	Engineering	Jan-89	580
Stripcropping, Contour (Ac.)	Agronomy	Jun-96	585
Stripcropping, Field (Ac.)	Agronomy	Jun-96	586
Structure for Water Control (No.)	Engineering	Jan-89	587
Subsurface Drain (Ft.)	Engineering	Jul-92	606
Surface Drainage Field Ditch (Ft.)	Engineering	Jan-89	607
Surface Drainage Main or Lateral(Ft.)	Engineering	Jan-89	608
Surface Irrig Erosion Cntrl (PAM)(Interim) (Ac.)	Engineering	2/97	716

Practice (Unit)	Discipline	Date	Code
Surface Roughening (Ac.)	Agronomy	Jun-96	609
Terrace (Ft.)	Engineering	Jan-89	600
Toxic Salt Reduction (Ac.)	Agronomy	Oct-91	610
Tree/Shrub Establishment (Ac.)	Forestry	Jun-94	612
Tree/Shrub Pruning (Ac.)	Forestry	Jul-97	660A
Trough or Tank (No.)	Engineering	Mar-96	614
Underground Outlet (Ft.)	Engineering	Jan-89	620
Upland Wildlife Habitat Management (Ac.)	Biology	Aug-98	645
Use Exclusion (Ac.)	Forestry	June-94	472
Vertical Drain (No.)	Engr/Agron	Oct-88	630
Waste Storage Facility (No.)	Engineering	Feb-95	425
Waste Management System (No.)	Engineering	Jun-96	312
Waste Treatment Lagoon (No.)	Engineering	Feb-95	359
Waste Utilization (No. & Ac.)	Engineering	Jun-96	633
Water Harvesting Catchment (No.)	Engineering	Jan-89	636
Water Sediment Control Basin (No.)	Engineering	Jan-89	638
Water Table Control (Ac.)	Engineering	Oct-88	641
Waterspreading (Ac.)	Engineering	Jan-89	640
Well (No.)	Engineering	Nov-98	642
Wetland Wildlife Habitat Management (Ac.)	Biology	Aug-98	644
Well Decommissioning (No.)	Engineering	Jan-89	351
Wetland Restoration (Ac.)	Eng/Bio	Aug-98	657
Wetland Creation (Ac.)	Eng/Bio	Aug-98	658
Wetland Enhancement (Ac.)	Eng/Bio	Aug-98	659
Wildlife Watering Facility (No.)	Biology	Aug-98	648
Windbreak/Shelterbelt Establishment (Ft.)	Forestry	Jun-94	380
Windbreak/Shelterbelt Renovation (Ft.)	Forestry	Jun-94	650

Component	Practice Number Guide	Unit	FY 2003 Cost
Bat House	644,645	ea	$125.00
Brush Control - Mechanical	314	ac	$20.00
Brush Piles for Wildlife	644,645	ea	$50.00
Brush Piling	666	ea	$5.50
Burning	314, 338	ac	$14.00
Chemical App. Normal 2-4D, Thinning rt Teb & Tordon	314, 645	ac	$16.00
Chemical App. Tebuthiuron, Tordon	314, 645	ac	$20.00
Chemical Control of Competitive Annuals	342, 512, 550, 644, 645, 650	ac	$13.00
Chiseling	324	ac	$7.50
Clearing and Snagging	326	lf	$20.00
Concrete Lining	468	cu yd	$175.00
Concrete, non-reinforced	561	cu yd	$155.00
Concrete, structural reinforced - equal to or more than 3 cu yd	313, 348, 349, 359, 378, 400, 402, 410, 436, 552B, 584, 587, 640, 644, 656, 657, 658, 659	cu yd	$425.00
Concrete, structural reinforced - less than 3 cu yd	313, 348, 349, 359, 378, 400, 402, 410, 436, 552B, 584, 587, 640, 644, 656, 657, 658, 659	cu yd	$500.00
Cross Wind Ridges	589A	ac	$30.00
Cross Wind Stripcropping	589B	ac	$30.00
Cross Wind Trap Strips	589C	ac	$30.00
Deep Tillage	324	ac	$15.00
Earth fill - Compacted	313, 320, 348, 349, 350, 356, 359, 378, 400, 402, 410, 436, 447, 552B, 560, 584, 587, 638, 640, 644, 656, 657, 658, 659	cu yd	$2.50
Earth fill - Haul	313, 320, 348, 349, 350, 356, 359, 378, 400, 402, 410, 436, 447, 552B, 560, 584, 587, 638, 640, 644, 656, 657, 658, 659	cy/mi	$0.20
Earth fill - Semi compacted	313, 320, 348, 349, 350, 356, 359, 362, 378, 400, 402, 404, 410, 436, 447 552B, 560, 584, 587, 638, 640, 644, 656, 657, 658, 659	cu yd	$2.00
Eaves - Gutter	558	lf	$1.20
Excavation - Common, Wet Conditions	378, 395, 400, 402, 410, 644, 656, 657, 658, 659	cu yd	$3.00
Excavation, Classified	313, 320, 348, 349, 350, 359, 362, 378, 400, 402, 410, 436, 447, 468, 552A, 560, 580, 584, 587, 638, 640, 644, 656, 657, 658, 659	cu yd	$8.00
Excavation, Common	313, 320, 348, 349, 350, 359, 362, 378, 400, 402, 404, 410, 436, 447, 468, 552A, 552B, 560, 580, 584, 587, 638, 640, 644, 656, 657, 658, 659	cu yd	$1.25
Fabric Weed Barrier 6 ft wide	380, 386, 391, 393, 395, 422, 580, 612, 644, 645, 657, 658, 659	lf	$0.45
Fabric Weed Barrier Squares, precut	391, 393, 395, 580, 612, 644, 645, 656, 657, 658, 659	sq ft	$0.10
Fence - Barbed Wire - 3 wire	382	lf	$0.85
Fence - Barbed Wire - 4 wire	382	lf	$0.95
Fence - Barbed Wire - 5 wire	382	lf	$1.05

Component	Practice Number Guide	Unit	FY 2003 Cost
Fence - Barbed Wire - 6 wire	382	lf	$1.15
Fence - Buck and Pole	382	lf	$3.50
Fence - Deer Resistant 6' minimum height	382	lf	$3.50
Fence - Steel Panel Gate with latch	382	lf	$13.20
Fence - Perm Power 2 wire Poly rope	382	lf	$0.50
Fence - Permanent Power 2 wire	382	lf	$0.40
Fence - Permanent Power 3 wire	382	lf	$0.50
Fence - Rail top w/2 or 3 barbed wire below	382	lf	$3.00
Fence - 4-wire w/dir change </= 1/4 mile	382	lf	$1.10
Fence - Steel Panel, w/steel or timber posts	382	lf	$8.00
Fence - Steel pipe w/cable, 4 cables	382	lf	$4.60
Fence - Steel pipe w/cable, 5 cables	382	lf	$4.80
Fence - Steel pipe w/sucker rod, 3 rods + rail	382	lf	$10.20
Fence - Steel pipe w/sucker rod, 4 rods	382	lf	$11.00
Fence - Steel pipe w/sucker rod, 5 rods	382	lf	$12.70
Fence - Suspension - 3 wire	382	lf	$0.45
Fence - Suspension - 4 wire	382	lf	$0.50
Fence - Suspension - 5 wire	382	lf	$0.55
Fence - Timber post w/10" boards	382	lf	$11.60
Fence - Timber post w/6"boards	382	lf	$7.60
Fence - Timber post w/8"boards	382	lf	$9.20
Fence - Woven Wire	382	lf	$1.75
Fence - Woven Wire Combination	382	lf	$1.85
Fire Break	394	ac	$30.00
Fish Barrier Removal **(actual not to exceed)	395, 396	ea	$5,000.00
Forest Stand Improvement	666	ac	$95.00
Gabions, installed (includes rockfill)	410, 580, 584	cu yd	$95.00
Geotextile filter	404, 580, 584, 587	sq yd	$2.00
Geotextile for wave protection	348, 349, 378, 402, 580, 658	sq yd	$4.00
Gravel	313, 348, 349, 359, 378, 395, 400, 402, 404, 410, 552B, 560, 580, 584, 587, 644, 656, 657, 658, 659	cu yd	$20.00
Grazing Land Mechanical Treatment	548	ac	$15.00
Herbaceous Wind Barriers	422A	ac	$45.00
Irr. Pipe - Hi pressure underground 80psi 10"	430DD	lf	$6.75
Irr. Pipe - Hi pressure underground 80psi 12"	430DD	lf	$7.20
Irr. Pipe - Hi pressure underground 80psi 15"	430DD	lf	$9.80
Irr. Pipe - Hi pressure underground 80psi 6"	430DD	lf	$4.50

Component	Practice Number Guide	Unit	FY 2003 Cost
Irr. Pipe - Hi pressure underground 80psi 8"	430DD	lf	$4.80
Irr. Pipe - Hi pressure underground plastic any dia.	430DD	lb	$1.25
Irr. Pipe -Low pressure underground plastic	430EE	lb	$1.25
Irr. Pipeline - Aluminum Tubing	430AA	lf/di"	$0.45
Irrig Subsurface Sys - Filter system, 31 to 120 ac	441	ea	$15,000.00
Irrig Subsurface Sys - Filter system, more than 120 ac	441	ea	$20,000.00
Irrig Subsurface Sys - Filter system,less than 30 ac	441	ea	$9,000.00
Irrig Subsurface Sys - Installation & Drip line	441	ac	$300.00
Irrigation Ditch&Canal Lining Flex. Membrane	428B	sq ft	$1.50
Irrigation Ditch&Canal Lining nonrein concrete	428A	cu yd	$175.00
Irrigation Field Ditch	388	lf	$1.50
Irrigation Land Leveling	464	ac	$500.00
Irrigation System - Hi/low conversion	442	ac	$80.00
Irrigation System - Sprinkler (New) <80 ac	442	ac	$700.00
Irrigation System - Sprinkler (New) > 140 ac	442	ac	$450.00
Irrigation System - Sprinkler (New) 81 - 140 ac	442	ac	$550.00
Irrigation System - Sprinkler - Travelling Guns	442	ft	$30.00
Irrigation System - Trickle	441	per/tree	$2.50
Irrigation, Gated Pipe, 08"	430HH	lf	$2.70
Irrigation, Gated Pipe, 10"	430HH	lf	$3.00
Irrigation, Gated Pipe, 12"	430HH	lf	$3.50
Irrigation, Chemigation Valve, 6"	441, 442, 443	ea	$660.00
Irrigation, Chemigation Valve, 8"	441, 442, 443	ea	$750.00
Irrigation, Screening Device 10"	442,533,430	ea	$1,150.00
Irrigation, Screening Device 6"	442,533,430	ea	$850.00
Irrigation, Screening Device 8"	442,533,430	ea	$950.00
Irrigation, Surge Valve, 08"	430HH	ea	$1,850.00
Irrigation, Surge Valve, 10"	430HH	ea	$2,100.00
Irrigation, Surge Valve, 12"	430HH	ea	$2,700.00
IWM - Record Keeping Required	449	ac	$3.00
Land Forming - Precision	462	ac	$300.00
Land Shaping and Filling	342, 393	ac	$225.00
Land Smoothing	466	ac	$100.00
Legal Land Survey Conservation Easement, <200 ac	657, 658, 659	ac	$30.00
Legal Land Survey, Conservation Easement = or >200 ac	657, 658, 659	ac	$25.00
Legal Survey & Map for water rights app(actual- not to exceed)	657, 658, 629 - WRP Easement Only	site	$1,000.00

Component	Practice Number Guide	Unit	FY 2003 Cost
Mulching	342, 393, 484	ac	$350.00
Nutrient Management	590	ac	$0.50
Obstruction Removal	500	ac	$500.00
PAM - Max 2 app's per yr	450	ac/app	$3.00
Pipe - Corrugated Metal 36"-60"	348, 349, 350, 378, 400, 402, 410, 436, 447, 552B, 558, 584, 587, 620, 638, 640, 644, 656, 657, 658, 659	lf/di'	$50.00
Pipe - Corrugated Metal 6"-30"	348, 349, 350, 378, 400, 402, 410, 436, 447, 552B, 558, 584, 587, 620, 638, 640, 644, 656, 657, 658, 659	lf/di'	$32.00
Pipe - HDPE <24	313, 348, 349, 350, 378, 400, 402, 410, 436, 447, 552B, 558, 584, 587, 620, 638, 640, 644, 656, 657, 658, 659	ft/di"	$1.15
Pipe - HDPE > or = 24	348, 349, 350, 378, 400, 402, 410, 436, 447, 552B, 558, 584, 587, 620, 638, 640, 644, 656, 657, 658, 659	ft/di"	$1.40
Pipe - Plastic	313, 348, 349, 350, 359, 378, 400, 402, 410, 436, 447, 552B, 558, 584, 587, 620, 638, 644, 656	lb	$1.25
Pipe - Steel	348, 349, 350, 378, 400, 402, 410, 430FF, 436, 447, 552B 558, 584, 587, 620, 638, 644, 656, 657, 658, 659	lb	$2.00
Pipe - Steel < 4"	516	lf	$2.50
Pipe <1 1/2" Plastic (above frost)	516	lf	$1.30
Pipe <1 1/2" Plastic (below frost)	516	lf	$1.70
Pipe > or = 1 1/2" Plastic (above frost)	516	lf	$1.35
Pipe > or = 1 1/2" Plastic (below frost)	516	lf	$1.95
Pipeline	657	lf/di"	$1.25
Pipeline - Livestock - Rock Excavation	516, 656, 657, 658, 659	lf	$4.00
Pipeline - Nonreinforced Concrete	313, 430CC	lf/di"	$1.40
Pond Sealing - Bentonite Sealant	359, 378, 436, 521C, 552A, 644, 656, 657, 658, 659	sq ft	$0.50
Pond Sealing - Earth	359, 378, 436, 552A, 644, 656, 657, 658, 659	cu yd	$2.50
Pond Sealing - Flexible Membrane	359, 378, 436, 521A, 552A, 644, 656, 657, 658, 659	sq ft	$1.50
Pond, C-Loc Sheet Piling	378	sq ft	$8.80
Pond, Silt Removal	378	ea	$3,000.00
Prescribed Grazing (Monitoring)	528A	ac	$0.25
Raptor Perch - Nesting Platform	645	ea	$200.00
Residue Mgmt-Mulch-till	329B	ac	$5.00
Residue Mgmt-No-till & Strip-till	329A	ac	$15.00
Residue Mgmt-Ridge till	329C	ac	$5.00
Revetment, Tree	395, 580	lf	$22.00
Rock	348, 349, 378, 395, 400, 402, 404, 410, 436, 468, 552B, 580, 584, 587, 644, 645, 656, 657, 658, 659	cu yd	$30.00
Rock (>36" dia.)	348, 395, 400, 410, 644, 645, 656, 657, 658, 659	cu yd	$55.00

Component	Practice Number Guide	Unit	FY 2003 Cost
Root Wads	395, 580	ea	$500.00
Stripping and replacing topsoil	313, 320, 348, 349, 350, 356, 359, 362, 378, 400, 402, 404, 410, 436, 447 552B, 560, 584, 587, 638, 640, 644, 656, 657, 658, 659	sq ft	$0.70
Seed & Broadcast- Native Species 4x normal rate	327, 342, 393	ac	$200.00
Seed & Broadcast-Tame Species 4x normal rate	327, 342, 393	ac	$200.00
Seed & Drilling - Dryland Pasture and Hayland	327, 386, 391, 393, 512, 644, 645	ac	$35.00
Seed & Drilling - Irrigated Pasture and Hayland	386, 391, 393, 512, 644	ac	$40.00
Seed & Drilling - Native	327, 550	ac	$50.00
Seed & Drilling - Native 2x normal rate	327, 342, 393	ac	$100.00
Seed & Drilling - Tame Species 2x normal rate	327, 342, 393	ac	$70.00
Seedbed Prep	342, 393	ac	$30.00
Seedbed Prep - Chemical	327, 380, 386, 391, 392, 393, 395, 612, 644, 645	ac	$13.00
Seedbed Prep - Mechanical	380, 386, 391, 392, 393, 612, 644, 645	ac	$9.00
Seedbed Prep - Moldboard	386, 391, 392, 645	ac	$15.00
Shallow Dugouts - Blasted Pits	644, 656, 657, 658, 659	ea	$1,500.00
Snow Fence	380, 392	lf	$2.00
Snow Harvesting Fence	727	lf	$4.00
Soil Bioengineering Components	580	lf	$20.00
Soil Test (one time - not to exceed list cost)	590	ea	$50.00
Spring Development	574	no	$2,000.00
Steel, structural	348, 349, 350, 378, 400, 402, 410, 436, 552B, 584, 587, 640, 644, 656, 657, 658, 659	lb	$2.70
Straw, baled w/unpicked grain	645	ton	$250.00
Subsurface Drain	606	lf	$4.00
Surface Drainage, Field Ditch	607	cu yd	$1.50
Surface Drainage, Main or Lateral	608	cu yd	$1.50
Tank - Wildlife - Guzzler >1500 gal	645, 648	ea	$2,500.00
Tank - Wildlife water <1000 gal	645, 648	gal	$2.00
Tank, Catchment Apron for Guzzler	648	ea	$1,700.00
Tank or Trough - cathodic protection	614	lb	$5.00
Tank or Trough (less than 4000 gallon)	614	cu ft	$7.25
Tank or Trough (more than 4000 gallon)	614	cu ft	$4.00
Tank or Trough, Automatic Waterer	614	ea	$500.00
Tank or Trough, Rubber Tire <4000 gal	614	cu ft	$9.00
Terraces	600	lf	$0.35
Timber - treated	313, 348, 349, 359, 395, 400, 402, 410, 436, 552B, 584, 587, 640, 644, 656, 657, 658, 659, 727	bd ft	$2.50