



Back at the Dateland property in Tempe, I established and nurtured many excellent specimen plants and trees. I monitored irrigation flow rates, and tracked water use on a desk-computer successfully for 6 years, giving life to good soils and creating an amazing habitat.

Healthy plants make healthy lives. The environmental benefits of conservation on cropland, ball fields and golf courses are vastly under-valued. Only 30% to 65% of the value derives from the traditional sources of income. Society can decide to value environmental services of biodiversity, air purification, scenic beauty, carbon sequestration, soil fertility, water filtration, and watershed protection. Since 2002, we see progress.

(Table 17.16 by N.C. Brady and R.R. Weil, 2002).

**TABLE 17.16 Proportion of the Potential Income from Ecosystem Goods and Services Provided by Five Hypothetical Land-Based Businesses that Vary Greatly in their Soil-Conserving Capabilities**

*Note that only 30 to 65 percent of the value derives from traditional sources of income (in bold). Society will have to develop innovative political, social and marketing means of appropriately rewarding each business for the total revenue or value it generates.*

Commodity or service	Proportion of net income (%)				
	Forestry business	Dairy farm business	Ranch business	Golf course	Grain business
Milk	0	<b>20</b>	0	0	0
Grains	0	<b>5</b>	0	0	<b>65</b>
Hay	5	<b>5</b>	<b>10</b>	3	0
Cattle	0	<b>5</b>	<b>30</b>	0	0
Timber	<b>30</b>	<b>5</b>	<b>5</b>	0	0
Carbon sequestration	15	10	<b>5</b>	2	12
Water filtration/collection	15	10	10	10	8
Air purification	5	5	5	5	5
Soil fertility	5	5	5	5	3
Scenic beauty	5	10	5	15	5
Recreation	<b>5</b>	5	5	<b>50</b>	0
Biodiversity	10	10	10	5	2
Salinity control	0	0	5	5	0
Medicinal plants	5	5	5	0	0

Based on concepts summarized in Daily, et al. (2000).

**comfortable office suites in Washington or Brussels...If they lived just one month amid the misery of the developing world, as I have for fifty years, they'd be crying out for tractors and fertilizer and irrigation canals and be outraged that fashionable elitists back home were trying to deny them these things."**

**Another voice :** *"One reason for the societal difficulty in establishing a tradition of environmental protection in the United States is the assumption that standards are developed to be fought over by teams fielded by various special interests. A degree of objectivity in environmental management professionals is possible (now) because scientific, regulatory norms that go beyond special interests continue to be established as societal guidelines. These norms and the many experiences of professionals in the field have produced an awareness that is the result of no one special interest group"* (J.M. Petulla, 1987).

**Taking this further, we subscribe to eight professional codes developed by C.S. Calian.**

- We aim to incorporate an environmental commitment and an ideal of service to the larger community.
- We believe we embrace the importance of knowledge, analysis, continued study and technical negotiation for the purposes of environmental protection.
- We offer to cooperate with colleagues in this goal along with lifelong learning about the many ways that lead through complex situations, a habit that leads to the maintenance of high-performance standards in the field.
- We commit to avoid all conflicts of interest that would jeopardize the standards of similar professionals in our similar work.
- We accept our duty to know one's limits and consult with others.
- We aim to demonstrate an attitude of respect for the worth of every individual.
- We consider pay-for performance roughly equivalent to the primacy of service over remuneration.
- We attempt to bear our fair share of the work in the profession's social role as volunteer, when able.