

**PUBLIC INVOLVEMENT
AND SOCIAL IMPACT
ANALYSIS**

**UNION BOOKING
FOR MARRIAGE**

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PUBLIC INVOLVEMENT AND SOCIAL IMPACT
ANALYSIS: A UNION SEEKING MARRIAGE

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Introduction

Like other government activities, water resource planning is changing. Good planning is more than technically predicting the future. A good planner encourages the examination of creative options in a world of many possible futures. As we plan for society, we actively change that human environment for which we plan. Thus, "stand-off" objective views of planning can create a false perception of scientific purity. These observations have been recognized for several years in the social science literature. They are periodically documented in water resources social impact studies. With legal and regulatory requirements for public involvement and social/environmental impact analysis, they are now recognized in the practitioner's world.

Theoretical, legal and de facto participatory views of planning continue to generate conflict within agencies and among planners. For example, planners commonly ask, "How can I project social impacts - I have no staff, data or resources." If I spend money on Public Involvement (PI) or Social Impact Assessment (SIA), does it pay off? Even if I think it necessary, can I justify more PI or SIA when it means less hydrologic studies?"

Very often a planner's background, training and indeed professional peer support have little to do with daily job demands which generate such questions.

Organizations must find ways to mesh public involvement and social impact demands with older views of planning. Program budget and review

priorities should fit priorities as dictated by daily job demands on the planner. Failure to do so will increase planners' dissonance and decrease planners' effectiveness.

This paper offers a conceptual basis to build programs for avoiding such a syndrome. In Section 1, I look at how Public Involvement itself is a social impact. In Part 2, I shift perspective and look at how social impact analysis requires public involvement. While specific arguments and examples used draw primarily on the U.S. Corps of Engineers, I think they can be generalized to other natural resource and public service agencies.

Public Involvement as a Social Impact

Public involvement programs themselves generate social impacts. To illustrate this point, I want to look at two areas of such impact. First, public involvement in planning is forcing our political system and planning activities to adapt to new public demands and changing values. Secondly, public involvement is beginning and will continue to force integrated program level explanation rather than project by project justification of agency activities.

Public Involvement and our Adapting Political System and Planning Activities

Very often planners refer to the "political" versus the "technical," or the "citizen" versus the "expert." Although the distinctions are useful, public involvement programs have increased the gray area between these extremes.

Talking about blending citizens and experts is easy; doing it is difficult. People working within institutions make public policy decisions.

A tenet of our democratic ideology is that governmental institutions provide opportunities for citizens to have a say in decisions which will affect their lives. In today's world, increasingly important decisions are made while carrying out activities we call "planning." Government planning activities are generally housed in administrative-bureaucratic agencies. Consequently, it is easy to see how planning can be viewed as an administrative problem. But is it?

For example, reducing the risk of flood damage obviously involves a set of "rationally" thought out steps. A situation can be "objectively" studied, a structure proposed, engineering specifications established, and personnel requirements estimated. Certainly these technical operations require administrative/technical skill. But, is there a risk if potentially flooded farmers don't perceive one? If not, and they are flooded, who pays the bill? Should a structure always be built? Could you propose an economical earth dam in a locality with a large cement industry? In short, does planning really assure public interest and social welfare?

Systems planning has evolved a sophisticated use of economic cost-benefit calculations assumed to embody social welfare. Other schools of economic thought and operations researchers look to optimization criteria. However, Arrow's impossibility theorem continually reminds us of the potential futility in searching for objective bases for valuing social welfare independent of the political system.¹ Indeed, recent close observers of the water resources scene see increased importance of social and cultural issues paralleling the increased politization of water resources management decisions.²

Expanded demands on valuable water supplies could rapidly deteriorate into a Hobbesian nightmare of selfish maximization. In this case, the utilitarian belief that public interest are realized in the market place summation of individual interest could break down. As we come to realize that planning creates as much as predicts our future--open resolution of resource use conflicts becomes more important. Social welfare functions are more clearly found in the acceptance of decisions of legitimate deliberative bodies than in "objective" economic calculations.

Actually, the politics of water resources development is well documented. However, the rules for making water resources development decisions are changing.³ For examples, it is no longer easy for a northern congressman to vote for the out-of-state flood protection or navigation system. His (her) constituents are likely to be vitally interested because shared values cut across time, geography, and political jurisdictions. Although that northern constituent may never see or use the facility, he (she) can personalize clear stakes in its construction. In short, natural resources management policies are national issues complete with vocal national, as well as local, constituencies.

Responding to changing rules, public involvement programs encourage the political system to adjust to mixes of new issues, new values and new clients. When public involvement programs raise new issues about the future among constituents, the risk to elected officials for avoiding such issues increases. Public involvement programs then induce the elected political system to adjust to planning decisions needs. Involvement programs encourage the "right" people to be involved at the "right" time.

To date, this change in public values and concerns has been reflected in the environmental and consumer participation movements. Such public awareness has effected the process by which natural resources allocation decisions are determined. For example, the planner now has administrative and legal requirements to "involve" the public. These requirements have their own legacy which in turn effects planners.

Consequently, the planner faces a dilemma. To involve the public he (she) has to know who. To know who, the planner must assess impacts. But to assess impacts, the planner must understand perceptions, needs and "bitches." In short, public awareness has resulted in involvement programs which themselves depend on impact analyses which in turn depend on the involvement programs.

This sounds like you can't solve the problem until you've solved it. Actually, it means that planning is iterative rather than linear. Indeed, Corps Engineering Regulations 1105-2-200, -215 recognize this fact. They require four planning tasks in each of three planning phases.⁴ However, as you can see in figure 1, the distribution of emphasis among tasks is different in each planning phase.

The problem identification task has relatively greater weight in the plan of study than intermediate planning stage. As we move to detailed plans, impact assessment programs are tailored to meet changing priorities within the evolution of a plan. This means the techniques used for public involvement will vary. For example, hearings, feedback balloting and other media techniques work better in problem identification than alternative formulation. Workshops might be better suited to alternative consideration

FIGURE 1

Figure 1

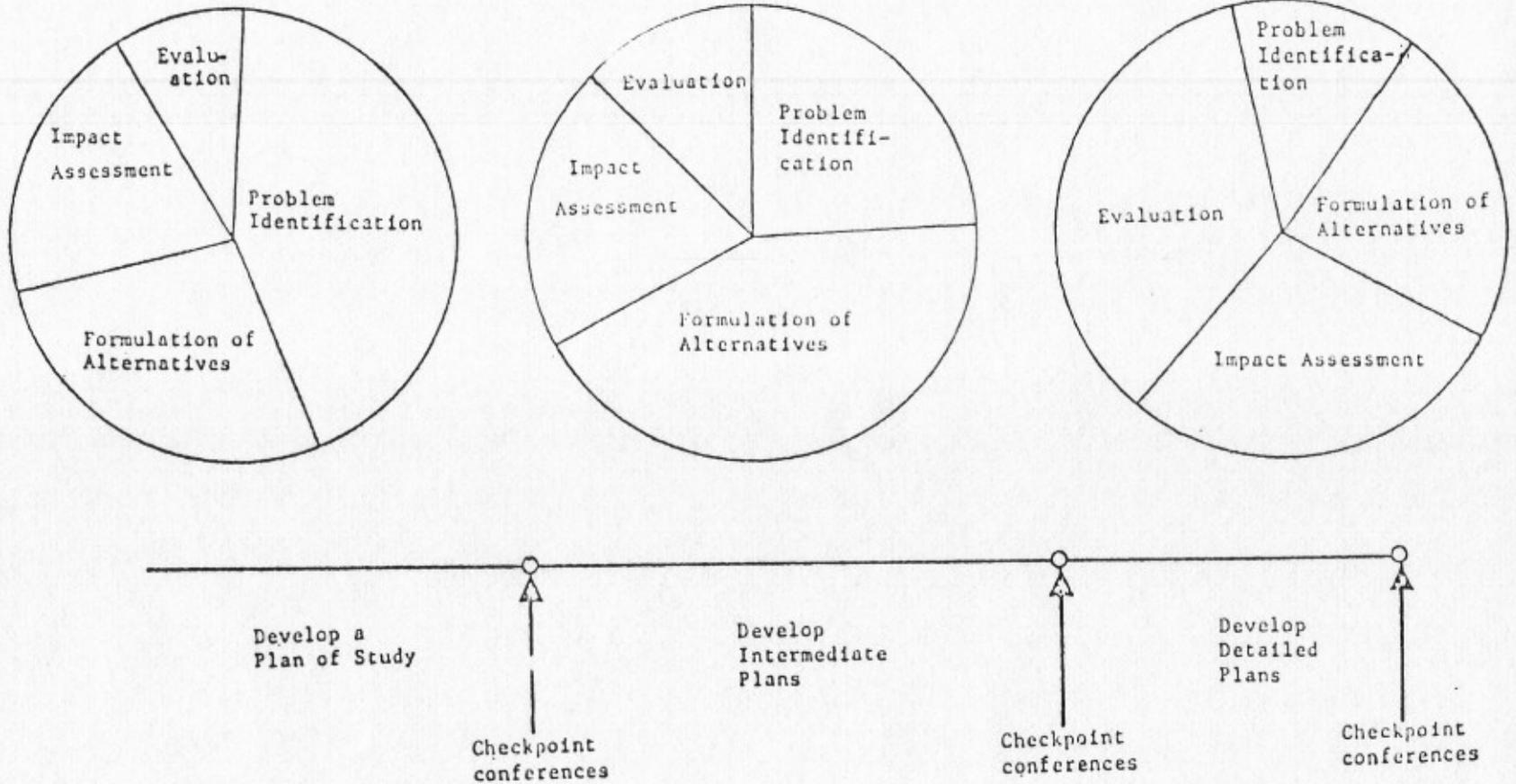
Corps Planning Process

Phase I: Develop Plan of Study

Phase II: Develop Intermediate Plans

Phase III: Develop Detailed Plans

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and evaluation. Thus, the planning process itself encourages a mixed public involvement strategy. However, a mixed public involvement strategy will, in turn, force the planner to adjust the planning process to accommodate the varying forms of information resulting from the mixed techniques. For example, preliminary impact assessment information gained from survey research at the plan of study stage might have to be reformatted for use in alternative formulation workshops in the intermediate plan stage.

Public involvement and social impact assessment are clearly interactive in such a planning process. Planning itself impacts on those for whom we plan. Public involvement based on initial assessments of that impact further clarifies both the planning activity impacts and those of the proposed solutions. One activity cannot be complete without the other. Yet, a recent survey of social scientists within the Corps showed that those planners most likely to do social impact assessments are least likely to do public involvement.⁵ Thus, we should be asking whether those people with social assessment skills are working with those with public involvement responsibilities, regardless of where they sit within the organization. This is basic--even before we talk about techniques--to cost effective planning.

Public Involvement Forces Program Integration

Planners or managers are often faced with public involvement after a project has been planned or is ready to start construction. This can be a dilemma and is illustrative of a much larger problem.

Projects have histories. Perceptions, attitudes and behavior all have built up around a project by the time construction starts. Projects

also have futures. Too often what will happen at the time of construction has not been carefully tied to what will happen when operating the project. In short, we often plan for one project, build another and operate a third.

Among other factors, these dichotomies are functions of time from project conception to project completion. What is viewed as hopeless public involvement with midstream projects is often a residue of past intransigence and bad feelings that now find legally sanctioned access to decision makers. In other words, the rules of the game have changed but some players still insist on playing by old rules.

As a project develops, public involvement programs will impact the human environment within which managers make decisions. Let me illustrate. Figure 2 is a general sketch of Corps functions. The solid line represents a linear development of projects over time. The broken line is symbolic of continuous feedback of a PI program at any given time to all preceding Corps PI efforts. Time is symbolized by $t_1 \rightarrow t_2 \rightarrow t_3$. Under each solid line, a brief suggestion of basic activities subsumed within Corps functions is outlined. Under operations and maintenance, the activities are not cumulative as in planning and construction but either exclusive or parallel activities. Finally, the solid triangles (\blacktriangle) are symbolic of the entrance of key new publics.

This outline suggests several questions. For example, if $t_1 \rightarrow t_2$ and $t_2 \rightarrow t_3$ are shortened or lengthened, will public involvement programs be affected? How will the projected public involvement program impact the project over time? While the solid triangles suggest entry of new publics, where else are they likely? Who will they be? What publics are likely to remain

across the whole $t_1 \rightarrow t_3$ period? What publics are likely to change? Why? Are there other places on the continuum where new publics might enter? Can such entries be anticipated? Is it true that each stage of the project the publics will be different? If they are different, what are the causes?

How is PI accomplished at the critical transition phases of planning to implementation and implementation to operation? How does the handling of such transition affect PI and visa versa? At any given time along the continuum, how do past PI programs and social impacts clarify the PI context and future PI needs? Should public involvement continually be different depending on the final character of the project? How does the final project operation affect the PI effort of the planning and construction function?

Within the construction/implementation functions, several phases, each having direct public contacts producing social impacts, can be identified. In Figure 2, the suggested phases are design, real estate acquisition, and construction. The critical question for PI throughout these phases is "how much flexibility?"

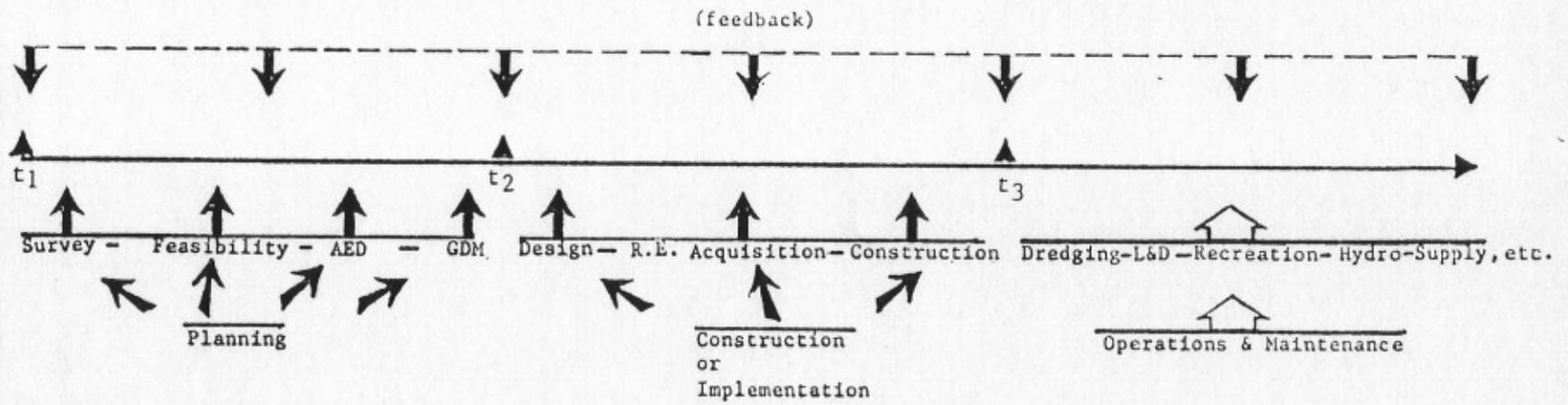
At the design stage, the degree of flexibility involved with a Phase II GDM should be addressed. Access road location, cost-sharing formulas, field exploration, plans and "specs," all link directly to publics. Here, agencies are dealing with the general public, other government agencies, contractors, dislocated landowners and tenants.

Since real estate acquisition directly impacts certain publics, agency flexibility in plan implementation must be clarified. Relocating, timing - of acquisition, temporary access, process of acquisition, and the process of settlement all have direct social impacts.⁶ For example, such factors

FIGURE 2

PUBLIC INVOLVEMENT IN CORPS FUNCTIONS

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are now crucial to the future of the Corps' Dickey-Lincoln Dam project⁷. Public involvement programs targeted to landowners, tenants, other governmental agencies, elected officials and taxing authorities could produce beneficial social impacts.

While not often recognized, the several phases of Corps construction and implementation directly impact certain publics. Preconstruction advertising, prebid, open-bid, and award followed by initial groundbreaking to final dedication all involve varied publics and have varying social impacts. Contractors, unions, Chamber of Commerce, residents, special interest groups, elected officials, government agencies, are such publics.

Beyond construction, plan implementation directly involves publics and causes impacts. For example, nonstructural flood control plans will necessarily involve publics. Evacuation patterns, community leadership response, individual flood proofing all require continued public interaction. In fact, more is empirically documented about individual and community behavior within disaster areas than almost any other social science area of Corps concern. Such knowledge can be integrated into public involvement aspects of nonstructural plan implementation.⁸

Public involvement for nonstructural plans presents several unique requirements. A considerable socio-economic range of publics and groups need to be involved over long periods of time. Continuing agency-public dialogue must be maintained through educational and other programs. Innovative techniques for identification of publics will also be needed. Thus, the nonstructural planning endeavors, public involvement and social impact analysis will blend very closely.

Public Works Operations and Maintenance activities generally, within the Corps specifically, are quite varied. However, all have high public visibility which translate into social impacts. For example, open houses at Corps hopper dredges have drawn as many as 5,000 people on a Sunday afternoon. Rangers talk with recreationists; boaters talk with Lock and Dam operators. Serious consideration of how public works projects can be used as community assets by wider publics is needed. For example, locks and dams can be good sites for basic science classes or lakes can be used as sites for ecology classes.

Although the degree of special PI training required by each separate operation and maintenance activity is not clear, the question of PI in operations and maintenance needs to be addressed. Corps lakeshore management policy illustrates this need. In some instances, lakeshore management plans on old reservoirs have turned formerly supportive landowners into new opposition groups. By regulating lake activity to arrest environmental deterioration and avoid overuse, adjacent private landowners can perceive land value depreciation. But, broadened recreation demand continues to force such projects to serve large numbers of geographically dispersed visitors. Addressing such issues and dealing with conflicts among competing publics could require special PI programs.

The point is, once planning is done with serious public involvement, implementation and operation environments are altered. Projects have legacies of interest group involvement which cannot be avoided. Although factors and issues change, the commitment to public interaction is difficult to avoid. In this sense, public involvement forces the decision maker to view a project

as a whole rather than as a narrow piece of activity within a specific project phase. However, internal agency organization rarely encourages a planner/manager to "holistically" view a project. For example, the Corps' district is not only compartmentalized by project phase, but differ functionally with the environmental, economic and other branches.

Although regulations and law call for interdisciplinary planning, rarely is the interdisciplinary team approach taken. Most likely multidisciplinary groups with changing personnel work on projects. This is not without reason. Time, money and manpower constraints often require such an approach. Nevertheless, commitment to public involvement will force such internal organizational issues. Hopefully, this will mean a new synergy among planning, engineering, implementation and operation divisions.

Such continuing commitment is vital to responsive public works. In being sensitive to changes over project history, planners are in a better position to anticipate future public needs and social impacts. While not perfect, it helps confront a critical planning problem: What will future generations--the consumers of today's project--want and need?

By encouraging dialogue among agencies and changing publics over project history, public involvement can provide an impact feedback mechanism to planners. Not only will projects be seen "holistically" but links among users of different social classes and government service producers will become clearer. As planners, we all have an interest in the relationship between consumption and production of government services. Such understanding is basic to evaluating the utility of our planning.

Social Impact Analysis as Public Involvement

Federal legislation and agency regulations are fraught with impact assessment terminology.⁹ Holistic, interdisciplinary, cumulative and social effects assessment are common vocabulary in today's world of water resources planning. In part, this is a realization that water resources projects are not simply distributive, but redistributive public policies.¹⁰ As such, questions of justice and equity have renewed importance.

How do we know if a project costs and benefits unduly favor or discriminate against groups? Legally, the concept of unduly revolves around some aspect of affected and interested parties claims.¹¹ Impact assessment generally, and social impact assessment specifically, is replete with attempts to objectively define distributional impacts. However, unless we understand the perceptions of affected parties both our expectations of claims and our view of "unduly" are likely to be inaccurate.

Impacted people will perceive losses and gains relative to other affected parties. It is not so much the absolute gain or loss as the perceived relative deprivation that is the key to projecting claims.¹² Even if a project demonstrates that each party gets more benefit than cost, a perception of equity is not assured. Actually, some people might have better benefit than cost calculations than others. Not all will be gaining equally. For example, because a project brings boating to an area where none existed, does not assure equity. Although all locals might have boating, some people might have more boating than others. This introduces a new peer group inequity where none existed!

Since social impact is concerned about how people behave, simple description of distributional costs is not sufficient. The planner needs

some insight on the perceptions of those affected. These perceptions of relative deprivation can then be used as a basis for projecting behavior. For example, will the above cited local boaters simply be satisfied with new found boating opportunities? Or, will some new local conflicts over access and availability develop? If new conflicts develop, how and where within the community will they arise?

Emotional public input gained in public involvement programs can provide the planner with insight into perceptions of gain or loss. Insights into origins of such perceptions will help the planner's continued working relationship with the community. They can also provide solid leads to effective, needed and efficient mitigation of uneven distribution. In short, the qualitative public involvement insights are critical to the more objective impact assessment efforts. As such, public involvement can be used to do better social impact assessment.

Now, arguing that social analysis needs public involvement conceptually forces us into that previously mentioned gray area between "citizen" and "expert," or "technical" versus "political." Indeed, as planners, we often assume that all experts are citizens but not all citizens are experts. But is this really true? Certainly not all citizens possess the expertise for calculating the strength of concrete necessary for a bridge abutment. But do all concrete experts possess the expertise to determine whether that bridge should be built? Just who should decide the how, why and where of this bridge?

Raising these issues adds to the complexity of an already complex situation. It doesn't make the job easier. However, we can take some comfort in the fact that we are not alone. This "citizen" versus "expert"

dilemma has thrust us planners into the center of an ongoing debate in Western History. Let me illustrate. That society has become more complex and technology more sophisticated is well argued in the literature. That this complexity and sophistication has encouraged debate over the rational strategies for maintaining and controlling societal change is clear. However, the debate over who has sufficient wisdom to "rationally" decide for society is far from new. In fact, it is a classic dialogue of Western civilization.

Democratic theory would find the answer in the collective wisdom of a body politic. Representative government would have us believe that such collective wisdom manifests itself through decisions of legitimately elected officials. But we all, from time to time, have questioned that "representativeness." So where does that leave us?

Some modern theorists calculate that most people do not want to participate.¹³ In fact, it might be a mistake to encourage too much participation, particularly in highly specific "technical" decisions. Others look to our technology of mass communication to provide the opportunity for more participation on more issues on a more national level.

But public involvement in planning is more than simply increasing the quantity of participation. It builds on a currently neglected but classical democratic faith. That is, the experience of participation at all levels of social activity makes good citizens.¹⁴ Good citizens create a good body politic which support good decisions.¹⁵ The dividing line between citizen and expert becomes amorphous, indeed less relevant.

On the eve of the first casualties of the Peloponnesian War, Pericles passionately describes the strength of Athens as the good character of its participating citizens.¹⁶ In the 19th Century Britain, John Stuart Mills finds representative government strong because it produces "active-self-helping" citizens.¹⁷ Cole expands the theme of participating experience into industrial democracy.¹⁸

This same theme can be found in current planning literature. Planning as social learning is reflected in the "new Humanistic" approaches to planning of Turner, Dunn, Schan and Friedman.¹⁹ Indeed, recent empirical planning studies by authors such as Gross and Benveniste show that the rational system of planning theory rarely fit the reality of the human conditions.²⁰

All of this is not to denigrate "scientific," "technical," or "rationalistic" planning. It is not to say that planning is pure politics. Our task, as planners, is to find a working middle ground. Using public involvement as an integral part of impact assessment is a start.

Suppose you project that at peak project construction classroom space in several small communities will be inadequate. What will you do? Will it be sufficient to simply announce your finding--assuming that locals will push the proper paper to get the proper aid? Can you say that your responsibility stops with projecting the impact because you have no authority to do anything else? Bear in mind that we know small rural communities generally lack the expertise and skill to push the right levers in time. Even if the expertise exists, it takes time for impact aid to show up. What will be the public involvement actions resulting from both your social impact projection and your answers to these questions?

Such questions raise several real intergovernmental relations issues. For example, the Seattle District of the Corps recently found itself in just such a position. Projections of inadequate school space during construction of additional power units in the Chief Joseph Dam resulted in special authorization legislation for combined federal funding, including the Corps, to build classroom facilities.²¹ The Tennessee Valley Authority (TVA) as a condition to building the Hartsville Power Complex, operates a multi-million dollar social effects mitigation program and delivers regular social monitor reports to Nuclear Regulatory Commission. Among other programs, TVA has purchased and lent vans to workers willing to set up car pools. Thus, unnecessary road construction, excess capacity and post-construction road debt hopefully will be minimized.

In these cases social impact projection has encouraged various public involvement program activity. In turn, such involvement programs can generate crucial social impact data. In the Chief Joseph Dam case, school-room attendance data necessary for cost-sharing formulas, depends upon involvement of local officials and publics.²² North Dakota's REAP program which monitors high plains impacts of energy development, depends on involvement program of local officials and other publics in local communities.²³

Going further, public involvement is even essential to new "scientific" social projection techniques. For example, comprehensive social projections usually include statements about social values and/or alternative scenarios. But where does information and data for such projection originate? Techniques such as KSIM, Cross-Impact, Policy Capturing, Trend-Impact are only the bones.²⁴ The meat, social value data, still depends on people

participating to generate such data. Consequently, public involvement programs become critical to cost/effective use of even the most advanced projection techniques.

These are but a few among several possible cases and ideas. Taken together, these thoughts on integrating social impact analysis and public involvement suggest needs for new frameworks to define planning. When we anticipate the future, as indeed we must, we create as well as predict the future. For there is not one future, but several possible futures. Sir Geoffrey Vickers, himself a distinguished bureaucrat and contemporary philosopher, eloquently suggests this point. He says,

Alternative models supporting alternative predicted outcomes cannot await the validation of history, even if history could validate them, and all appeal to rival sets of logical argument, all of which can be questioned, on their assumptions if not on their reasoning, by those who find their conclusions unwelcome. This apparently inconclusive process familiarizes participating minds, even with the most unwelcome facts and arguments. It speeds social learning. It may speed the recognition of reality when it erupts. It may even generate a common familiarity wide enough to allow action in anticipation. In any case, it helps to form the future which it claims to predict...Viewed thus, the clamorous debate about the future is to be prized for its educative more than its predictive value.

Thus, we are saying that man is the focus of planning. All this activity and debate is really over how to improve the human condition. Another contemporary British scientist, Lord Ashbey, clearly implies this:

The notion that the "balance of nature" is delicately poised and easily upset is nonsense. Nature is extraordinarily tough and resistant, interlaced with checks and balances, with an astonishing capacity for recovering from disturbances in equilibrium.

The formula for survival is not power: it is symbiosis.

Geopolitics, social psychology, social anthropology, political science (despite its name): these are still regarded as second-class citizens in the hierarchy of the sciences. But if my theses is correct these are the disciplines which will help us to understand and to influence even if we cannot control the destiny of Industrial Man.

Conclusions

* In light of the previous discussion, planners would be well to ask the following questions about plans and/or projects:

1. What communities are directly affected by our planning? By our proposed alternatives?
2. What groups of people and/or individuals are affected?
3. Who are the constituents of the Plan? Who are they likely to be in the future? Are there any "remote" constituents?
4. Who is indirectly affected? How?
5. Apart from our specific project concerns, what are the major concerns of the affected communities? Are they water related? If not, how will our alternatives come to bear on these concerns?
6. How are decisions made in these affected communities? Who makes them?
7. Are any of the Section 122 (and/or NEPA) social effects pertinent? Which ones? Why not others?
8. Will social effects mitigation be necessary? If so, how will it be done?
9. Do I have working definitions for my evaluative criteria for such things as community cohesion?
10. Are there any short-term versus long-term differences in social impact? Have I considered the effects of time?

11. Are there any analogous cases to my problem? Have I used them?
12. What have I learned from the Public Involvement effort? Where has that effected my impact analysis?
13. What are the likely new problems to be created by various proposed alternatives? Is this project beneficial? What social problems does it solve versus those it creates?
14. What possibilities for implementation exist? Do they make a difference?
15. What will be done to continue agency~~++~~public dialogue--through implementation and construction of my project?

I think answering these questions requires an integrated public involvement and social impact analysis program.

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