1. Explain the policy implications of changing the way gas leases are offered by the state under the shallow gas program.
   
   a. How has the shift from offering leases according to the “best interest findings” of the state under the conventional oil and gas drilling program to offering leases which would “benefit the residents of the area” under the shallow gas program affected public policy?
   
   b. Last session, the Alaska legislature passed HB 69 which modified the shallow gas program AS38.05.177 by adding a new subsection to read:

   (0) If the department clearly demonstrates an overriding state interest, the commissioner may approve a waiver of local planning authority approval and requirements relating to compliance with local ordinances and regulations….

   Explain how this legislation may have contributed to the recent October 2003 decision by the Alaska Division of Oil and Gas to halt any new leasing or permits for coal bed methane drilling throughout the state.

   c. The state of Alaska is currently under pressure to buy back the coal-bed leases issued for the Mat-Su Borough and Homer. What do you think the outcome of this conflict will be? Explain.

2. The shallow gas act AS 38.05.177 (c) says: “If, after review of information received during the public comment period, the director determines that the discovery of a local source of natural gas would benefit the residents of an area, the director shall execute a lease for the area…” Sketch three different ways an administrator could operationally define and measure the benefit to residents of the area. Would these different approaches yield different results? Explain. What definition and measure would you prefer and why?

3. This is primarily a story about property rights. According to the Daily News account property ownership in Alaska differs dramatically from ownership in other states.
   
   a. Describe the current property rights of land owners in the affected area. Be specific about the rights to use that owners have. How does state law limit these rights?
   
   b. Describe the current property rights of lease holders who have the right to explore and produce methane. What factors if any limit their rights?
   
   c. Suppose there is no change in the current methane leasing law. Will the result necessarily be inefficient? Why might you expect the current distribution of rights to result in market failure? Explain.
   
   d. Would the Coase Theorem apply in this case under existing rules? Why or why not?
   
   e. What changes to the structure of property rights could you suggest to guarantee the efficiency of the outcome? Why would you suspect your rules would be superior?
NEAR HATCHER PASS -- Scott and Billie Haan moved into an airy four-bedroom ranch home in the Sun Valley subdivision in late August. Lifelong Alaskans making good on a dream, the couple wanted to raise their three small children in the rolling country of the Talkeetna Mountain foothills near the road to Hatcher Pass.

But a week later, a phone call sounded an alarm. A neighbor was wondering if they had heard about the gas-well drilling that was planned for the area. The call led the Haans to a discovery that people across the Valley were making last summer: Though they had a deed and paid taxes on their home and land, they didn't own the minerals beneath their feet. And the Haans and their neighbors were belatedly learning that the state had sold the rights to subsurface gas two years ago, and now a company from Denver was taking an active interest in their area.

That company, Evergreen Resources Inc., has been accumulating leases and now holds rights to explore and produce coal bed methane across 300,000 acres in the Matanuska-Susitna Borough. As part of its effort to learn more about the geology of the area, Evergreen plans to drill a core sample on a 110-acre forested tract owned by an Anchorage man, about a quarter mile from the Haans' $200,000 home.

The couple doesn't know what the future holds any more than Evergreen. But they say they can't help but fear the worst -- trucks rumbling past, noisy compressor stations, a network of pipelines and roads.

"We had no clue. We were blindsided," Scott Haan said. Since that August day when they heard of Evergreen, their lives have become a parade of
meetings, late night e-mails, worried conversations with neighbors.

"I've been completely obsessed," he said.

His wife, sitting next to him on a new couch in the living room, shook her head.

"I called the title company that day. I said, 'Do we own our subsurface rights?' " Billie Haan said. "She just laughed. She said, 'Nobody owns them in Alaska.' "

Like people from Homer to the Holitna River, the Haans learned a surprisingly little-known fact: In Alaska, more than any other state, few private citizens own the mineral rights, separated decades ago from the land above.

Instead, the valuable subsurface estates are held by the state or federal government, or Native corporations, or sometimes even other people, a situation known as a "split estate."

Billie and Scott Haan, with children Tracie, 7, Robert, 5, and Colleen, 3, recently moved into a new house in the Hatcher Pass area. Then the Haans discovered that a neighbor is allowing Evergreen to test for methane nearby. "We had no clue. We were blindsided," Scott Haan said. *(Photo by Stephen Nowers / Anchorage Daily News)*

Evergreen Resources Inc.’s 22,500-square-foot gas well pad near Houston includes one of eight test wells in the Valley. Evergreen officials recently announced that the test wells failed to produce enough gas for commercial production. *(Photo by Stephen Nowers / Anchorage Daily News)*
Law dictates that mineral rights trump surface rights. And in places where the state owns the minerals, state law gives an operator not only the rights to the resource but to the reasonable use of someone else’s private property for whatever is necessary to extract the minerals -- pipelines, roads, railroad tracks -- though the law encourages the operator to compensate the landowner.

For many living in a state known for its protection of private property rights, it's a rude awakening: Gas companies, or almost any resource developer, have the right to what's under your back yard.

Evergreen, the Colorado company just starting to explore for gas throughout the Mat-Su, has repeatedly promised not to drill without landowner permission. The company generally finds other places to drill if the surface owner doesn't want a gas well, chief executive Mark Sexton said.
"We work with landowners," Sexton said. "We have been known to move plans for where we would drill wells four or five times."

But despite the company's assurances, the fears of some Mat-Su residents have crystallized around horror stories from gas development in Wyoming and other states: depressed property values, dry or polluted water wells, industrial sites next to neighborhoods.

The worrisome umbrella over it all is the powerlessness over mineral rights generated by the existence of a split estate.

"That's my biggest thing," said John Vinduska, who lives outside Palmer at the base of Lazy Mountain on 120 acres surrounded by gas leases. Vinduska and his brother came to Alaska in the 1970s, built a tidy log house next to the road and pieced together their property lot by lot.

A quiet man in the construction business, Vinduska never thought he'd be siding with environmentalists on anything. Now he and his brother, Jarel, are regular sights at any public meeting where coal bed methane is involved.

Nobody likes to pay taxes, John Vinduska said, but to pay taxes on property for years only to find out that somebody else can get rich from what's underground?

"Boy, that is the most ridiculous, absurd law ever created. ... It's just downright communism is what it is, that the wealth belongs to the state, not the people."

ALASKA'S UNIQUE SITUATION

The situation that Vinduska and others are fuming about has given Alaska the Permanent Fund and, for years, one of the lowest tax burdens in America. Landowners throughout the West deal with split estates, but here, the state owns more subsurface acreage than any other state.

And the issue has become more pressing because of a law sponsored by a Valley senator, Republican Scott Ogan, that created a unique method of issuing leases to companies seeking coal bed methane, also called shallow gas.

In conventional oil and gas drilling, the state determines the location of exploration and production based on "the best interest" of the state, a process that involves public comment and allows consideration for everything from subsistence hunters to fiscal effects on communities.

But under the state's shallow gas program, implemented in 2000, producers choose the land they want to lease. They pay $5,000 to file a lease application for the three-year right to explore across as much as 5,760 acres. And if they discover and start producing gas, they can stay until the field is played out.

Essentially, the state must approve the lease if the gas is found to "benefit the residents of an area."
That language is so broad, state officials say, they face a potential lawsuit if they
don't approve the lease, regardless of public comment.

"It basically took out all the power of the state to do a balancing test on the costs
and benefits," said Chris Rose, a Sutton resident who is leading the opposition to
drilling without more safeguards. "Instead, it allowed the developer to decide where
they wanted to go."

Even if the leases are next to homes or schools.

Joanne Hogg shares a property line with the proposed drilling site near the Haans.
Hogg and her boyfriend spent the last four years and most of their time and money
building a home on a little more than five acres. Now, pink flagging tape marks a
surveyor's work as part of an Evergreen geologic core hole slated for drilling next
month.

Hogg doesn't know exactly how close to her home the hole will be.

"They can pretty much do what they want right now. It is scary. I go up and down.
Maybe this isn't that bad. But what is this leading to?" she said. "They could put a
road, platform, they could do whatever they wanted. And that would pretty much
ruin everything we have here."

The Anchorage man who owns the tract and who signed a land-use agreement with
Evergreen didn't return a phone call requesting comment.

MINERALS IN STATE'S HANDS

The Alaska Statehood Act allowed the state to select 105 million acres, much of it
rich in oil, gas and other minerals, from what was originally federal land. The state
cannot transfer ownership of those minerals. If it does, the federal government can
take it back.

"That was the justification that the territory used to convince Congress we were a
viable state," said Pirtle Bates, with the state Division of Oil and Gas. "What we hung
our hat on for being able to exist as a state was to not be dependent on the federal
government."

The federal government retained about 60 percent of the state's land. Native
corporations also received more than 40 million acres through the Alaska Native
Claims Settlement Act. Land in private hands amounts to less than 1 percent of the
state's total.

It's rare that Alaskans own their mineral rights. Generally, only homesteaders who
staked their property before statehood in 1959 obtained -- and can sell -- those
rights.

Still, the consequences of the split-estate situation could be seen as bad for a few,
good for many. It's not just companies like Evergreen that stand to benefit.
The upside to state retention of mineral rights comes to every Alaskan every October in the form of a Permanent Fund dividend check. A quarter of all oil and gas royalties are deposited into the state's Permanent Fund program, as Ogan, R-Palmer, a former Evergreen consultant, likes to point out. The state receives 12.5 percent of the royalties from coal bed methane operations.

"We get a PFD because the state retained the subsurface rights," Ogan said at a Lazy Mountain community council meeting in September. "We've all been getting compensated for that collective ownership."

STATEWIDE STORY

It was Evergreen's proposal to explore for methane across the Mat-Su that triggered widespread public realization about the split estate conflict that arises when different owners hold surface and subsurface rights.

But the potential for similar conflicts exist statewide.

In Homer, the state recently approved more than 20,000 acres of gas leases to David Lappi, an Anchorage geologist who then sold most of them to Unocal. The leases grant subsurface rights under public and private land in the hills around town, but also on benches including land beneath an elementary school.

The state also is considering issuing gas leases beneath 20,000 acres of state land near the Kuskokwim River in the Holitna basin to a regional Native corporation.

Residents in Sleetmute, an Athabascan village about 15 miles northwest of the proposed gas field, fear the drilling could mar prime hunting, fishing and berry-picking grounds.

But Bates said there is ample precedent in Alaska for oil and gas to coexist with other land uses. That's been the case on the Kenai Peninsula for a half century, he said.

The state has even issued conventional oil and gas leases within the Anchorage Bowl, though no commercial development has come of it, he said.

It's unclear how much interest oil and gas operators would have in developing on split estates in a place like Anchorage, Bates said. The state would likely require mitigation measures that could be restrictive.

Realistically, Alaskans are probably more concerned than they need to be about gas companies invading private property, said John Shively, a former state commissioner of natural resources under Gov. Tony Knowles and an expert on land-use issues.

"Where they think something bad might happen to them, they're obviously going to fear the worst," Shively said. "In the end, people will find nobody's putting a drill rig in their back yard."
GOOD NEIGHBOR?

Alaska looms as a potentially huge boon for the coal bed methane industry, a significant player in the Bush administration's energy policy.

The Alaska Division of Geological & Geophysical Surveys estimates the amount of natural gas reserves trapped in coal at up to 1,000 trillion cubic feet -- more than all the reserves in the Lower 48 combined.

Evergreen drilled two clusters of test wells between Wasilla and Houston last year. While gas flowed from the holes in the ground, the company recently announced the volume doesn't appear profitable.

But in the coming months, the company plans to ramp up exploration across a wider swath of the Mat-Su, especially north of the Castle Mountain Fault, a seismic boundary that runs from Houston to Sutton. Crews plan to drill seven core holes to take geologic samples by the end of the year, including the one near the Haan place.

The company doesn't expect to know for one or two years if its Mat-Su operations will bear fruit. If they do, company officials have promised -- at public meetings, in opinion pieces in newspapers, in paid advertisements -- never to drill under anyone's house.

Evergreen operates more than 1,000 wells in southern Colorado's Raton Basin. Almost every one was drilled after the company reached an agreement with the surface landowner, company officials say.

Company chief Sexton described the company's relations with landowners this way: 90 percent good, 5 percent "mixed," and another 5 percent "who do not want us there, do everything they can to stop us."

Evergreen "obviously" tries to work around the latter group, Sexton said. As far as the middle group, their complaints vary, Sexton said.

"Something happened differently than expected," he said. "We did not move quickly enough to remedy a situation."

But generally, company officials say, they do everything they can to avoid problems with landowners -- and heavily populated areas.

Depending on the coal seams, local geology and water tables, the company has some flexibility about where to drill, he said. Generally, if an area proves productive, Evergreen drills four wells per square mile, or 640 acres.

"When you have 160 acres to work with, you can almost always find a place that's going to accommodate the people in the area," Sexton said.

In Colorado -- as they will be required to do in Alaska -- Evergreen must attempt to obtain a "surface-use agreement" from the property owner before drilling. During that process, the landowner negotiates with the company for payment and other
compensations, such as road placement. The company is not required to agree to all requests, only to negotiate.

If the negotiations fail, the company can go to the state and pay a bond to cover damages, and enter the site over the landowner's objections.

That's happened once in the Mat-Su, in an area between Wasilla and Houston known as the Pioneer Unit, according to Matt Rader, another oil and gas division official.

Three years ago, Ocean Energy Inc. got into a dispute with two landowners. In June 2000, the state oil and gas division director ordered the company to post a $9,000 bond on one property and a $5,000 bond on another. The landowner with the smaller bond sued the company, then later settled for an undisclosed amount, Rader said.

In Colorado, Evergreen rarely gets to the point where it has to post a bond, Sexton said. And no landowner has ever gone to the state for reparation of damages, he said.

"Ninety-nine percent of the time, the process works fine. About 1 percent of the time it doesn't," he said. "If we can come to terms, we have a lot of flexibility, and we use it."

Company spokesman Jack Ekstrom declined to say how much Evergreen generally pays landowners for the right to disturb their property. The company won't talk about specific deals, he said, though it doesn't require landowners to sign confidentiality agreements.

"There are so many variables, it is hard to put a number on it," he said in a telephone interview from Denver. For instance, if a landowner demands that Evergreen spend extra money to route a road or pipeline away from a spot of personal significance, the company might offer a smaller cash payment than it otherwise would.

VIEW FROM COLORADO

Mike Burnes, an Anchorage resident who owns property in southern Colorado, doesn't have an Evergreen operation on his 35-acre property about 15 miles outside of Trinidad, Colo. But his next-door neighbor does.

Three sometimes noisy compressors stationed in a barnlike green metal building sit about 300 yards from his property line. An access road to the site bisects his land.

"Basically, the property's worthless to build on right now," Burnes, 41, said recently. "I didn't move there to live next to an industrial area."

Burnes, a retired lieutenant colonel in the U.S. Air Force, attended the Air Force Academy in Colorado Springs. He hoped to retire to the property, with its views of the 14,000-footers of the Sangre de Cristo range.

Now, he said, he's ruled out building anything there until at least Evergreen is gone.
"I would never ever consider owning property where I did not own the mineral rights again," he said. "It's ludicrous."

In Colorado, where there are thousands of established gas wells, landowners come up against the split estate issue frequently, officials there say.

Linda Pavelka, permitting supervisor for the Colorado Oil and Gas Conservation Commission, said she gives this advice to people without mineral rights dealing with gas operators: Knuckle down and make a good deal for yourself.

"You better start thinking about the best way to make this work on your property, because you're going to have to let them in," Pavelka said. "You might as well do everything you can to get the best out of the deal."

Pavelka processed more than 200 permits in September and got notified of trouble just a few times, she said. Often, problems come up when a landowner wants more compensation than a company is willing to pay.

Rarely does Pavelka hear a complaint about Evergreen, she said.

"They're pretty good about trying to work with their landowner, but it just comes down to (the fact that) a lot of people just don't want them out here, period," she said.

In Alaska, state officials responding to Mat-Su complaints recently started developing guidelines to make sure coal bed methane development is done correctly here. Borough officials are also starting work on local ordinances.

Both processes are expected to create landowner protections, such as buffers around homes.

Still, Scott Haan and other residents say, why drill gas wells in residential areas at all, unless companies want to take advantage of existing roads to operate more cheaply.

"I'm not anti-development. I think it's probably a good thing. I can understand you've got to have a balance," Haan said. "But why in the neighborhoods? That's my beef."

Daily News reporter Zaz Hollander can be reached at zhollander@adn.com.

What the Alaska Constitution provides

Section 1 of Article VIII: "It is the policy of the State to encourage the settlement of the land and the development of its resources by making them available for maximum use consistent with the public interest."

Section 9 of Article VIII: "Subject to the provisions of this section, the Legislature may provide for the sale or grant of state lands, or interest therein, and establish
sales procedures. All sales or grants shall contain such reservations to the State of all resources as may be required by Congress or the State and shall provide for access to these resources. Reservation of access shall not unnecessarily impair the owners' use, prevent the control of trespass, or preclude compensation for damages."