

UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

No. 01-51099

GDF REALTY INVESTMENTS, LTD.; PARKE PROPERTIES I, L.P.; PARKE
PROPERTIES II, L.P.,

Plaintiffs-Appellants,

versus

GALE A. NORTON, Secretary, U.S. Department of the Interior;
MARSHALL P. JONES, Director, U.S. Fish and Wildlife Service,

Defendants-Appellees.

Appeal from the United States District Court
for the Western District of Texas

March 26, 2003

Before DAVIS, BARKSDALE, and DENNIS, Circuit Judges.

RHESA HAWKINS BARKSDALE, Circuit Judge:

The Endangered Species Act of 1973, 16 U.S.C. § 1531, *et seq.* (ESA), contains a "take" provision, 16 U.S.C. § 1538(a)(1)(B). For this challenge to Congress' Commerce Clause power, U.S. CONST. art. I, § 8, cl. 3, at issue is whether ESA's take provision is unconstitutional *as applied* to six species of subterranean invertebrates found only within two counties in Texas (Cave Species). Central to this question is whether, to demonstrate the requisite substantial effect on interstate commerce, Cave Species

"takes" may be aggregated with those of all other endangered species. They can be; the judgment is **AFFIRMED**.

I.

In 1983, Dr. Fred Purcell and his brother purchased an interest in 216 acres in Travis County, Texas, near the City of Austin (the property). The property (lying within approximately 1,200 acres known as the Parke) consists of seven tracts in which the Purcells, as the limited partners in Parke Properties I, L.P., and Parke Properties II, L.P., hold a 70 percent interest. GDF Realty Investments, Ltd., holds the remaining interest in the property. It is located at the intersection of two major highways in what is, commercially and residentially, a rapidly growing area.

The property is part of the Jollyville Plateau and is characterized by karst topography, in which water percolating through limestone rock creates caves, sinkholes, and canyons. The property contains a number of caves, including Tooth, Kretschmarr, Root, Gallifer, and Amber, as well as a collection of caves known as the Cave Cluster.

Since acquiring the property, the Purcells and their partners (Purcells) have attempted to develop it commercially, including the installation of water and wastewater gravity lines, force mains, lift stations, and other utilities. These improvements have been dedicated to the City of Austin; a right-of-way, to Travis County.

In 1988, the United States Fish and Wildlife Service (FWS), an agency under the auspices of the Department of the Interior, issued a Rule listing five subterranean invertebrate species as endangered under § 4 of ESA, 16 U.S.C. § 1533(a)(1). 53 Fed. Reg. 36,029 (16 Sept. 1988). A sixth species was similarly listed in 1993. 58 Fed. Reg. 43,818 (18 Aug. 1993). These six species are found on the property; they are the Bee Creek Cave Harvestman, the Bone Creek Harvestman, the Tooth Cave Pseudoscorpion, the Tooth Cave Spider, the Tooth Cave Ground Beetle and the Kretschmarr Cave Mold Beetle. The Rules were issued in order to protect the Cave Species from increasing dangers, primarily new development. 16 U.S.C. § 1531 (a)(1); 53 Fed. Reg. 36,029.

The Bee Creek Cave Harvestman, the Bone Creek Harvestman, and the Tooth Cave Pseudoscorpion are subterranean, eyeless arachnids (arthropods bearing four pairs of legs and no antennae); they range in size from 1.4 to 4 mm. The Tooth Cave Spider, a subterranean arachnid with eyes, measures 1.6 mm in length. The Tooth Cave Ground Beetle and the Kretschmarr Cave Mold Beetle are subterranean insects, the latter being eyeless; they vary in size from 3 to 8 mm.

The Cave Species were listed as endangered for a number of reasons. First, as noted, they were primarily being threatened with "potential loss of habitat owing to ongoing development activities". 53 Fed. Reg. 36,031. Second, no state or federal laws

were in place to protect them or their habitat. *Id.* at 36,031-32. Finally: “[The Cave Species] require the maximum possible protection provided by [ESA] because their extremely small, vulnerable, and limited habitats are within an area that can be expected to experience continued pressures from economic and population growth”. *Id.* at 36,032.

Pursuant to § 9(a)(1) of ESA, 16 U.S.C. § 1538(a)(1)(B), it is unlawful to “take” a member of a species listed as endangered. ESA defines “take” as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect....” 16 U.S.C. § 1532(19). Pursuant to authority given it by § 4(d) of ESA, 16 U.S.C. § 1533(d), FWS has defined “harm” to include significant modifications or degradations of a habitat which kill or injure protected wildlife “by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering”. 50 C.F.R. § 17.3.

The Cave Species are found only in underground portions of Travis and Williamson Counties, Texas. There is no commercial market for the Cave Species. At least 14 scientific articles concerning the Cave Species have been published in journals or other publications by 15 scientists. Some of them have visited Texas in order to study the Cave Species. For this research, members of the Cave Species have been transported to and from

museums in New York, California, Pennsylvania, Illinois, and Kentucky.

In 1989, FWS notified the Purcells that their development plans might constitute a Cave Species take. In 1990, in an effort to alleviate FWS' concerns, the Purcells deeded approximately six acres of the property to Texas Systems of Natural Laboratories, Inc., a non-profit environmental organization. The gifted acres included various caves and sinkholes in which the Cave Species were known to live. The Purcells also constructed gates covering the most ecologically sensitive caves. These acts conformed to recommendations made by an expert on the Cave Species.

In 1991, the Purcells contracted to sell a portion of the property. Because FWS refused to state, however, that future development would not constitute a take, the agreement fell through. After clearing brush from the property in 1993, Dr. Purcell was advised by FWS that he was under federal criminal investigation for possible endangered species takes.

Subsequent to these incidents, the Parke's owners (including plaintiffs) filed in federal court for a declaratory judgment that development of the Parke would not constitute an endangered species take. ***Four Points Util. Joint Venture v. United States***, No. 93-CV-655 (W.D. Tex. 1993). The district court ordered FWS to conduct an environmental review of the Parke.

In a 1994 letter summarizing that review, FWS notified the Parke's owners that the proposed development would likely constitute a take of the Cave Species, as well as of two bird species (golden-cheeked warbler and black-capped vireo). FWS' letter also noted that the Purcells' property within the Parke "could be developed without causing a take if development, among other things, [was] scaled back from the canyons, and surface and subsurface drainage and nutrient exchange [was] provided for".

The district court dismissed the action in September 1994. It ruled that FWS had to first determine whether a take had occurred; as FWS' letter indicated, it had not made that determination.

In 1997, the Purcells attempted to obtain ESA § 10(a) incidental take permits. See 16 U.S.C. § 1539(a). These permits allow takes of endangered species under certain circumstances, as listed in 16 U.S.C. § 1539 (a)(2)(B).

The Purcells first sought the permit from the Balcones Canyonlands Conservation Plan, a regional body from which landowners obtain § 10(a) permits to develop protected land by paying "mitigation fees". It refused the application, however, because the relevant land was entirely within a protected area.

The Purcells next applied to FWS for the permit. See 16 U.S.C. 1539(a)(1). Their applications stated they planned to develop a shopping center (including a Wal-Mart), a residential subdivision, and office buildings (commercial development). FWS

decided that the deeded preserves were inadequate to protect the Cave Species. As a result, the Purcells were unable to contract for the purchase and development of the property.

In July 1998, FWS advised the Purcells that the permits would be denied, but did not issue the denials. This effectively prevented the Purcells from challenging FWS' action.

Therefore, the Purcells filed suit in federal court, seeking a declaration that the permits had been denied *de facto*. **GDF Realty, Ltd. v. United States**, No. 98-CV-772 (W.D. Tex. 1998). FWS then issued a formal statement, denying the permits based on its conclusion that, *inter alia*, Cave Species takes would occur if development were allowed. The district court ruled the permits had been denied. It also admonished FWS for delaying the denials when it had never intended to grant the permits.

In 1999, plaintiffs filed two actions in federal court. In the instant Commerce Clause action, they claim that, pursuant to **United States v. Lopez**, 514 U.S. 549 (1995), amplified post-filing of this action by **United States v. Morrison**, 529 U.S. 598 (2000), the ESA take provision, as applied to the Cave Species, is unconstitutional. (The second action, in the Court of Claims, No. 99-CV-513 (Fed. Cl. 1999), claims an unconstitutional taking under the Fifth Amendment. It has been stayed pending this action.) In 2000, Parke Properties I, L.P., and GDF Realty Investments, Ltd., filed for bankruptcy under Chapter 11. **In re Parke Properties I**,

L.P., No. 00-12587FM (Bankr. W.D. Tex. 2000); **In re GDF Realty Investments, Ltd.**, No. 00-12588FM (Bankr. W.D. Tex. 2000).

For this action, the parties agreed there are no factual disputes. Therefore, they filed cross-motions for summary judgment. In 2001, the district court granted summary judgment to defendants (FWS), holding the take provision constitutional under the Commerce Clause. **GDF Realty Investments, Ltd. v. Norton**, 169 F. Supp. 2d 648 (W.D. Tex. 2001). The district court analyzed the application of the take provision in the light of plaintiffs' proposed property development. Being "hard-pressed to find a more direct link to interstate commerce than a Wal-Mart [(as noted, one was to be located on the property)]", *id.* at 662, the court held the take provision's incorporation of the Cave Species, as applied to plaintiffs, was substantially related to interstate commerce, *id.* at 664.

II.

A summary judgment, reviewed *de novo*, *e.g.*, **Horton v. City of Houston**, 179 F.3d 188, 191 (5th Cir.), *cert. denied*, 528 U.S. 1021 (1999), is proper if "there is no genuine issue as to any material fact and ... the [movant] is entitled to a judgment as a matter of law". FED. R. CIV. P. 56(c). *E.g.*, **Celotex Corp. v. Catrett**, 477 U.S. 317 (1986). Because there are no material fact issues, the only question is the constitutionality *vel non* of the take provision as applied to the Cave Species and pursuant to the power

granted Congress under the Commerce Clause. U.S. CONST. art. I, § 8, cl. 3.

"In reviewing an act of Congress passed under its Commerce Clause authority, we apply the rational basis test as interpreted by the *Lopez* court." *Groome Resources, Ltd. v. Parish of Jefferson*, 234 F.3d 192, 203 (5th Cir. 2000). In other words: "Due respect for the decisions of a coordinate branch of Government demands that we invalidate a congressional enactment only upon a *plain showing* that Congress has exceeded its constitutional bounds". *Morrison*, 529 U.S. at 607 (emphasis added).

Recently, our court extensively discussed the history of the Commerce Clause and the earlier noted landmark *Lopez* and *Morrison* decisions relied upon by plaintiffs. *United States v. Ho*, 311 F.3d 589 (5th Cir. 2002). We need only briefly revisit that discussion.

Ho concerned using less expensive procedures for removal and disposal of asbestos than necessary to comply with, *inter alia*, 42 U.S.C. §§ 7412(h) and 7414(a) of the Clean Air Act, 42 U.S.C. § 7401 *et seq.*, and implementing regulations, 40 C.F.R. § 61.145. *Ho* claimed these statutes and regulations, *as applied to him*, violated the Commerce Clause. Our court held the sections of the Clean Air Act were constitutional exercises of Congress' power to regulate interstate commerce. *Ho*, 311 F.3d at 603-04. In doing so, our court described "first principles" of commerce clause jurisprudence. *Id.* at 596-601. No authority need be cited for the

fundamental and well-known limitation on the power of our Federal Government: the Constitution grants it limited and enumerated powers; those powers not so granted the Federal Government are retained by the States.

This division of powers was thought necessary "to ensure protection of our fundamental liberties". *Id.* at 596 (quoting *Lopez*, 514 U.S. at 552 (internal citation omitted)). Justice Kennedy summarized this point in his *Lopez* concurrence:

Though on the surface the idea may seem counterintuitive, it was the insight of the Framers that freedom was enhanced by the creation of two governments, not one. "In the compound republic of America, the power surrendered by the people is first divided between two distinct governments, and then the portion allotted to each subdivided among distinct and separate departments. Hence a double security arises to the rights of the people. The different governments will control each other, at the same time that each will be controlled by itself."

514 U.S. at 576 (Kennedy, J., concurring) (quoting THE FEDERALIST NO. 51, at 323 (James Madison)(C. Rossiter ed., 1961)). In keeping with the subject at hand, the strength of this governmental system is aptly described by Kipling: "For the strength of the pack is the wolf and the strength of the wolf is the pack". RUDYARD KIPLING, THE SECOND JUNGLE BOOK, *The Law of the Jungle* 189 (Penguin Books 1987) (1895).

As noted, one of the Federal Government's enumerated powers is "to regulate Commerce ... among the several States ..." (interstate

commerce). U.S. CONST. art. I, § 8, cl. 3. Since **NLRB v. Jones & Laughlin Steel Corp.**, 301 U.S. 1 (1937), "Congress has had considerably greater latitude in regulating conduct and transactions under the Commerce Clause" than it had previously been afforded. **Morrison**, 529 U.S. at 608. On the other hand, our constitutional structure mandates a distinction between "what is truly national and what is truly local". **Id.** at 617-18; **Lopez**, 514 U.S. at 567-68.

The Court's fairly recent decisions in **Morrison** and **Lopez** have defined the outer limits of Commerce Clause power. **Lopez** described three categories of activity which Congress may regulate under it: "the use of the channels of interstate commerce"; "the instrumentalities of interstate commerce"; and "those activities having a substantial relation to interstate commerce, i.e., those activities that substantially affect interstate commerce". 514 U.S. at 558-559. As the parties note, at issue is the third category – "those activities that substantially affect interstate commerce".

The Cave Species exist only in Texas. Therefore, at issue are ESA takes concerning *intrastate*, not interstate, activity. Pursuant to **Lopez**, **Morrison** identified four considerations for use in deciding whether intrastate activity substantially affects interstate commerce. 529 U.S. at 609.

The first consideration is the economic nature *vel non* of the intrastate activity. *Id.* at 610-11. Along this line, **Morrison** cited **Lopez**'s cautionary language:

Admittedly, a determination whether an intrastate activity is commercial or noncommercial may in some cases result in legal uncertainty. But, so long as Congress' authority is limited to those powers enumerated in the Constitution, and so long as those enumerated powers are interpreted as having judicially enforceable outer limits, congressional legislation under the Commerce Clause will always engender "legal uncertainty".

Id. at 610 (quoting **Lopez**, 514 U.S. at 566).

The second consideration is the presence *vel non* of a jurisdictional element in the statute, which limits its application to instances affecting interstate commerce. *Id.* at 611-12.

The third consideration is any Congressional findings in the statute or its legislative history concerning the effect the regulated activity has on interstate commerce. *Id.* at 612.

The final consideration is the attenuation of the link between the intrastate activity and its effect *vel non* on interstate commerce. *Id.*

As described in **Ho**, there are two ways in which intrastate activity might substantially affect interstate commerce. 311 F.3d at 598-99. FWS urges that Cave Species takes have this effect under each method.

First, the activity alone might have such an effect. See, e.g., *Jones v. Laughlin Steel Corp.*, 301 U.S. 1 (1937). Second, in some circumstances, the activity's effects may be aggregated with those of other similar activities, the sum of which might be substantial in relation to interstate commerce. *Morrison*, 529 U.S. at 613 (striking down civil remedy provision of Violence Against Women Act, 42 U.S.C. § 13981, while not adopting "a categorical rule against aggregating the effects of any noneconomic activity"). See also, e.g., *Lopez*, 514 U.S. at 559-61; *Hodel v. Virginia Surface Mining & Reclamation Assn., Inc.*, 452 U.S. 264 (1981); *Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241 (1964); *Wickard v. Filburn*, 317 U.S. 111 (1942).

Whether and how Congress may apply the aggregation principle are controversial questions. The pitfalls are apparent. For example, any imaginable activity of mankind can affect the alertness, energy, and mood of human beings, which in turn can affect their productivity in the workplace, which when aggregated together could reduce national economic productivity. Such reasoning would eliminate any judicially enforceable limit on the Commerce Clause, *thereby turning that clause into what it most certainly is not, a general police power.*

Ho, 311 F.3d at 599 (emphasis added).

In other words, and as the Supreme Court has made quite clear, the aggregation principle has limits. For example, *Lopez* held that gun possession near schools could not be regulated under the Commerce Clause power. The statute at issue proscribed knowing

possession of "a firearm at a place that [an individual] knows ... is a school zone". 18 U.S.C. § 922(q)(1)(A) (1988). The Court held the statute had "nothing to do with 'commerce' or any sort of economic enterprise". 514 U.S. at 561.

It bears reminding that at issue is the power to regulate interstate *commerce*. In that sense, commerce is "[t]he exchange of goods and services" or "[t]rade and other business activities". BLACK'S LAW DICTIONARY 263 (7th Ed. 1999). Commerce is traffic, "but it is something more: it is intercourse". *Lopez*, 514 U.S. at 553 (quoting *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 189-90 (1824)). In *Wickard*, for example, the intrastate activity (wheat produced solely for producer's personal use) was held "commercial" because it affected market conditions. 317 U.S. at 128. In this regard, *Groome* noted the "broad reading [to be given] commercial and economic activities under the Commerce Clause". 234 F.3d at 208-09.

As mentioned, *Morrison* noted, for aggregation purposes, the importance of the economic nature of the regulated activity: "While we need not adopt a categorical rule against aggregating the effects of *noneconomic* activity in order to decide these cases, thus far ... our cases have upheld Commerce Clause regulation of intrastate activity *only* where that *activity is economic in nature*". 529 U.S. at 613 (emphasis added).

Lopez did, however, approve the standard provided in **Maryland v. Wirtz**, 392 U.S. 183 (1968) (holding constitutional the 1961 and 1966 extensions of the Fair Labor Standards Act, 29 U.S.C. §§ 203, 206, and 207). **Lopez** stated: “[W]here a *general regulatory scheme bears a substantial relation to commerce*, the *de minimis* character of individual instances arising under that statute is of no consequence”. 514 U.S. at 558 (emphasis in original; internal citation omitted). The *de minimis* instance, however, must be “an *essential part of a larger regulation of economic activity*, in which the regulatory scheme *could* be undercut unless the intrastate activity were regulated”. **Id.** at 561 (emphasis added). See also **Hodel v. Indiana**, 452 U.S. 314, 329 n.17 (1981); **United States v. Ballinger**, 312 F.3d 1264, 1270 (11th Cir. 2002); **Freier v. Westinghouse Electric Corp.**, 303 F.3d 176, 201-03 (2nd Cir. 2002), *petition for cert. filed* (U.S. 6 Jan. 2003) (No. 02-1036); **United States v. Cortes**, 299 F.3d 1030, 1035 (9th Cir. 2002).

Ho held such a regulatory scheme existed with regard to asbestos removal:

First, the regulated intrastate activity, asbestos removal, is very much a commercial activity in today's economy. It is a booming industry, given the hazardous nature of asbestos and its seeming ubiquity in older buildings. There is nothing inherently criminal or disfavored about asbestos removal; in fact, it might be considered a public service, and many reputable and certified

businesses exist solely to remove asbestos from contaminated buildings.

Both the state and federal governments license businesses and individuals in the field. Most, if not all, asbestos removal projects have a commercial purpose, because handling toxic carcinogens is not something many people enjoy for its own sake. Unless the owner of an asbestos-containing building needs to renovate the building or demolish it for use of the land on which it sits, he is very likely to let sleeping dogs lie and not incur the costs or dangers of asbestos removal.

311 F.3d at 602. Moreover, by using methods less expensive than those required to comply with the regulatory scheme, Ho was able to gain a commercial advantage over his competitors, thereby substantially affecting, or undercutting, the economic regulatory scheme. *Id.* at 603. In addition to the economic nature of the activity, *Ho* examined the other three *Morrison* considerations in holding aggregation proper. 311 F.3d at 602-04.

In the light of *Lopez* and *Morrison*, the key question for purposes of aggregation is whether the nature of the regulated activity is economic. As noted, *Morrison* and *Lopez* recognize this question is likely to generate "legal uncertainty". *Morrison*, 529 U.S. at 610; *Lopez*, 514 U.S. at 566. One way in which the regulated activity might be economic is when, as discussed earlier, the intrastate activity is part of an economic regulatory scheme which could be undercut but for the particular intrastate regulation. *Lopez*, 514 U.S. at 561.

Post-**Lopez**, our court has faced these questions. A pre-**Morrison** decision, **United States v. Bird**, 124 F.3d 667, amended by 1997 U.S. App. LEXIS 33988 (5th Cir. 1997), cert. denied, 523 U.S. 1006 (1998), affirmed a conviction under the Freedom of Access to Clinic Entrances Act, 18 U.S.C. § 248. **Bird** held that noncommercial, intrastate activity (threats and intimidation directed at provider of abortion services) may be aggregated to find a substantial effect on interstate commerce. **Id.** at 676-82. For that holding, the determining factor was that "there is a national commercial market in abortion-related services such that the regulated conduct—considered in light of the size and scope of the benchmark market—substantially affects interstate commerce". **Id.** at 677. See **id.** at 681-82.

Noting **Bird** was decided pre-**Morrison**, **Ho** seems to leave open the question whether aggregation can be extended to non-economic activity. 311 F.3d at 600, n.10. Further, in **United States v. Hickman**, 179 F.3d 230 (5th Cir. 1999)(pre-**Morrison**), cert. denied, 530 U.S. 1203 (2000), and **United States v. McFarland**, 311 F.3d 376 (5th Cir. 2002)(post-**Morrison**), petition for cert. filed, (U.S. 7 Jan. 2003) (No. 02-8338), our evenly divided en banc court addressed aggregating individual, intrastate robberies to find a substantial effect on interstate commerce under the Hobbs Act, 18 U.S.C. § 1951 (criminalizing efforts to "obstruct[], delay[], or

affect[] commerce or the movement of any article or commodity in commerce, by robbery or extortion ...").

The dissent in **Hickman**, adopted by half of our en banc court, stated:

[I]ndividual acts cannot be aggregated if their effects on commerce are causally independent of one another. That is, if the effect on interstate commerce directly attributable to one instance of an activity does not depend in substantial part on how many other instances of the activity occur, there is an insufficient connection—in other words, an interactive effect—and the effect of different instances cannot be added. If, on the other hand, the occurrence of one instance of the activity makes it substantially more or less likely that other instances will occur, then there is an interactive effect and the effects of different instances can be added.

179 F.3d at 233 (Higginbotham, J., dissenting).

This “interactive effect” requirement flows from the requirement in **Lopez** that failure to regulate the intrastate activity could “undercut” the entire scheme. Along this line, **Ho** held that the instance of intrastate asbestos removal had an effect on the larger economic regulation of the asbestos industry. 311 F.3d at 602.

In addressing the Hobbs Act issue faced in **Hickman**, one dissent in **McFarland**, again adopted by half of our en banc court, stated:

Assuming, *arguendo*, that there is a class of [**Lopez**] category three cases [substantial effect] as to which there are no restraints whatever on aggregation, we conclude that such

a class would *exclude* instances where "the regulated activity" is *not* properly described as "commercial" or "economic" *in the same general sense* as "commercial."

311 F.3d at 396 (Garwood, J., dissenting) (emphasis in original).

In the intervening light of *Morrison*, that dissent agreed with the *Hickman* dissent.

Where the Supreme Court has applied aggregation to uphold federal regulation of intrastate conduct against constitutional challenge under the Commerce Clause, there has always been a *rational basis* to find sufficient interrelationship or commonality of effect on interstate commerce among the discrete intrastate instances regulated and between them and a scheme of regulation (protection, enhancement or restriction) of some particular interstate market or activity such that the regulation of those intrastate activities can rationally be viewed as necessary to the effectiveness of or a meaningfully supporting part of the scheme of regulation of that particular interstate activity or market.

Id. at 401 (emphasis added).

Plaintiffs maintain that Cave Species takes have no relationship, let alone a substantial one, to interstate commerce. They concede, however, that all takes of endangered species, if aggregated, would have the requisite substantial effect; but, they maintain, aggregation is not proper because Cave Species takes are non-economic in nature and not an essential part of a regulatory scheme.

ESA was enacted in 1973 in response to threats to fish, wildlife, and plants (wildlife). 16 U.S.C. § 1531(a)(1). These

threats arose principally from "pollution, destruction of habitat and the *pressures of trade*". H.R. Rep. No. 93-412, at 2 (1973) (emphasis added). Congress noted that "the pace of disappearance of species is accelerating". *Id.* at 4. This acceleration was troubling because, *inter alia*, "it is in the best interest of mankind to minimize the losses of genetic variations". *Id.* at 5. That interest, Congress said, was "simple: [the genetic variations] are potential resources". *Id.*

They are keys to puzzles which we cannot solve, and may provide answers to questions which we have not yet learned to ask.

To take a homely, but apt, example: one of the critical chemicals in the regulation of ovulation in humans was found in a common plant. Once discovered and analyzed, humans could duplicate it synthetically, but had it never existed – or had it been driven out of existence before we knew its potentialities – we would never have tried to synthesize it in the first place.

Who knows, or can say, what potential cures for cancer or other scourges, present or future, may lie locked up in the structures of plants which may yet be undiscovered, much less analyzed? More to the point, who is prepared to risk ... those potential cures by eliminating those plants for all time? Sheer self-interest impels us to be cautious.

Id.

Tennessee Valley Authority v. Hill, 437 U.S. 153 (1978) (***TVA***), the famous snail darter decision, reviewed ESA's legislative history in the process of upholding an injunction pursuant to the Secretary of the Interior's determination that the operation of a

federal dam would eradicate an endangered species. At issue was 16 U.S.C. § 1536, which requires federal agencies to consult with the Secretary regarding projects and to “utilize their authorities in furtherance of the purposes of [ESA]....” The Court recognized Congress’ “newly declared national policy of preserving endangered species”, *id.* at 176, and held: “The plain intent of Congress in enacting [ESA] was to halt and reverse the trend toward species extinction, *whatever the cost*”, *id.* at 184 (emphasis added).

Of course, notwithstanding this “plain intent”, ESA’s take provision as applied in this case must have firm footing in the Commerce Clause. In this regard, ESA’s take provision has no jurisdictional requirement that might otherwise limit its application to species bearing some relationship to interstate commerce. Nor does the take provision list the species to be protected. Instead, ESA incorporates listings, promulgated from time to time by FWS, that determine which species are covered by the take provision. 16 U.S.C. § 1533(c).

A.

Aggregation or no, the first of the four **Morrison** considerations concerns the economic nature *vel non* of the *regulated activity*. On this key point, at issue is what constitutes the “regulated activity”. Plaintiffs assert that, for evaluating substantial effect, we should look only to the expressly regulated activity – Cave Species takes. FWS responds that, in

addition, we should consider such regulation in the light of plaintiffs' planned commercial development and, by extension, its effect on interstate commerce.

The district court agreed with FWS and looked *primarily* to plaintiffs' planned development:

[T]he regulated activity in this case is plaintiffs' alleged take of the Cave Species by their planned development of the Property. This development includes plans to build "a shopping center, a residential subdivision, and office buildings" on the Property.... This activity, standing alone, "would easily be classified as substantially affecting interstate commerce."

169 F. Supp. 2d at 658 (internal citations omitted).

The district court characterized plaintiffs' challenge as being "as-applied". Whether it is "as-applied" or "facial", the district court correctly concluded it should evaluate plaintiffs' conduct in determining whether the take provision, as applied to the Cave Species, was unconstitutional. See ***City of Chicago v. Morales***, 527 U.S. 41, 78 n.1 (1999) (Scalia, J., dissenting) (aside from First Amendment "overbreadth" cases, "a facial attack, since it requires unconstitutionality in all circumstances, necessarily presumes that the litigant presently before the court would be able to sustain an as-applied challenge"); see also ***United States v. Salerno***, 481 U.S. 739 (1987). The above-quoted passage from the district court opinion reflects, however, that the court extended the scope of this relevant conduct beyond plaintiffs' Cave Species

takes; it *primarily* considered plaintiffs' commercial motivations that would underlie the takes. As discussed below, and consistent with the Supreme Court's interpretation of the Commerce Clause, we conclude that the scope of inquiry is primarily whether the *expressly regulated activity* substantially affects interstate commerce, *i.e.*, whether takes, be they of the Cave Species or of all endangered species in the aggregate, have the substantial effect.

In this regard, neither this court, nor the Supreme Court, has explicitly determined the scope of the substantial effects analysis. Nonetheless, the Supreme Court has expressed concerns about this issue. In ***Solid Waste Agency of Northern Cook County v. United States Army Corps of Eng'rs***, 531 U.S. 159 (2001), under § 404(a) of the Clean Water Act, 33 U.S.C. § 1344(a), the Corps of Engineers claimed jurisdiction over abandoned sand and gravel pits which had become seasonal ponds and, concomitantly, habitats for migratory birds. As a result, the Corps prevented construction of a landfill on a site. The landfill developers contended that, through such regulation, the Corps overstepped its statutorily-prescribed jurisdictional bounds, and, alternatively, Congress exceeded its Commerce Clause power.

Resolving the case by interpreting the Clean Water Act, the Court avoided the constitutional issue. Nevertheless, it shed light on the scope-issue at hand:

[The Government] ... note[s] that the protection of migratory birds is a national interest of very nearly the first magnitude, and that, as the Court of Appeals found, millions of people spend over a billion dollars annually on recreational pursuits relating to migratory birds. These arguments raise significant constitutional questions. For example, we would have to evaluate the precise object or activity that, in the aggregate, substantially affects interstate commerce. This is not clear, for although the Corps has claimed jurisdiction over petitioner's land because it contains water areas used as habitat by migratory birds, respondents now, *post litem motam*, focus upon the fact that the regulated activity is petitioner's municipal landfill, which is plainly of commercial nature. But this is a far cry, indeed, from the "navigable waters" and "waters of the United States" to which the statute by its terms extends.

Id. at 173 (emphasis added; internal citation and quotation omitted).

Again, we must resolve the question of which activities are to be primarily considered in order to determine substantial effect *vel non*. Each of the three **Lopez** categories recognizes Congress' power to regulate where the *object of regulation* relates to interstate commerce: channels, instrumentalities, or activities. Neither the plain language of the Commerce Clause, nor judicial decisions construing it, suggest that, concerning substantial effect *vel non*, Congress may regulate activity (here, Cave Species takes) solely because non-regulated conduct (here, commercial development) by the actor engaged in the regulated activity will have some connection to interstate commerce.

In expanding its scope-inquiry to plaintiffs' commercial motivations, the district court relied on **Groome**, which evaluated Congress' Commerce Clause power to regulate under the Fair Housing Act, 42 U.S.C. § 3604(f)(3)(B). **Groome** stated that, in **Lopez** and **Morrison**, "neither the 'actors' nor the 'conduct' of the regulation had a commercial character". 234 F.3d at 204 (emphasis added). **Groome** recognized that, in analyzing the effect on interstate commerce, courts look only to the expressly regulated activity. In **Groome**, that was the sale and rental of housing. The actor's conduct was commercial in nature, but that characteristic was only relevant insofar as it fell within the regulated activity. **Id.** at 205-16.

Unlike **Groome**, the district court in this case looked primarily beyond the regulated conduct – Cave Species takes – in order to assess effect on interstate commerce. It looked to plaintiffs' planned commercial development of the property where the takes would occur. True, the *effect* of regulation of ESA takes may be to prohibit such development in some circumstances. But, Congress, through ESA, is not directly regulating commercial development.

To accept the district court's analysis would allow application of otherwise unconstitutional statutes to commercial actors, but not to non-commercial actors. There would be no limit to Congress' authority to regulate intrastate activities, so long

as those subjected to the regulation were entities which had an otherwise substantial connection to interstate commerce.

Along this line, looking primarily beyond the regulated activity in such a manner would "effectually obliterate" the limiting purpose of the Commerce Clause. **Jones & Laughlin Steel Corp.**, 301 U.S. at 37. Concomitantly, the facial challenges in **Lopez** and **Morrison** would have failed. For instance, regulation of gun possession near schools, at issue in **Lopez**, would arguably pass constitutional muster as applied to a possessor who was a significant gun salesman. Therefore, § 922(q)(1)(A) could not have been facially unconstitutional. See **Salerno**, 481 U.S. at 745. Similarly, the Violence Against Women Act, at issue in **Morrison**, would arguably have been a constitutional exercise of Congressional power if it were used to prosecute a person who committed violence against women and then sold a substantial number of videotapes of the encounter in interstate markets. It too would have withstood a facial attack. Such results, of course, run contrary to **Lopez** and **Morrison**.

Ho ruled that "the regulated intrastate activity, asbestos removal, is very much a commercial activity in today's economy.... Both the state and federal governments license businesses and individuals in the field. Most, if not all, asbestos projects have a commercial purpose...." 311 F.3d at 602. Thus **Ho** primarily analyzed the expressly regulated activity. Only after doing so did

Ho note: "Moreover, [plaintiff's] activities were driven by commercial considerations". *Id.*

Two circuits have published opinions upholding ESA's constitutionality; they looked, at times, to the nature of the actor's general conduct. *National Association of Home Builders v. Babbitt*, 130 F.3d 1041 (D.C. Cir. 1997), *cert. denied*, 524 U.S. 937 (1998) (*NAHB*) (pre-*Morrison*); *Gibbs v. Babbitt*, 214 F.3d 483 (4th Cir. 2000), *cert. denied*, *Gibbs v. Norton*, 531 U.S. 1145 (2001). (In addition, the Ninth Circuit, in upholding the constitutionality of the Eagle Protection Act, 16 U.S.C. 668, approvingly cited a district court decision, *Palila v. Hawaii Dep't of Land & Natural Resources*, 471 F.Supp. 985 (D. Haw. 1979), *aff'd*, 639 F.2d 495 (9th Cir. 1981), concerning ESA's effect on interstate commerce. *United States v. Bramble*, 103 F.3d 1475, 1481 (9th Cir. 1997).)

In *NAHB* and *Gibbs*, however, the actor's general conduct was not the sole basis for finding economic activity or a substantial effect on interstate commerce. To this extent, *NAHB* and *Gibbs* are consistent with the analysis in *Ho*.

NAHB, decided pre-*Morrison*, considered whether Congress had the power to regulate takes of the Delhi Sands Flower-Loving Fly, a species found only in California. The takes were caused by a planned hospital renovation. For a divided panel, two members held

ESA constitutional, each on different grounds; one member opined it was unconstitutional.

In the main opinion, Judge Wald upheld ESA on two bases: as a valid regulation of the channels of interstate commerce; and because the takes substantially affected interstate commerce. For the substantial effect analysis, she did not look beyond the expressly-regulated activity. She did so, however, for the "channels of interstate commerce" analysis. 130 F.3d at 1048. There is, of course, good reason to look beyond the regulated activity to determine whether such channels are being used; whether an actor deals in these channels is directly relevant.

In her **NAHB** concurrence, Judge Henderson concluded the takes affected biodiversity, which in turn substantially affected interstate commerce. She briefly noted, however, that the regulation plainly affected interstate commerce because "[it] relates to both the proposed redesigned traffic intersection and the hospital it is intended to serve" **NAHB**, 130 F.3d at 1059 (Henderson, J., concurring).

Of course, the ESA regulation at issue in **NAHB** did not relate to traffic intersections; it related to fly takes. Judge Henderson relied, in part, on the following language from **Heart of Atlanta Motel** to support her conclusion: "The facilities and instrumentalities used to carry on this commerce such as railroads, truck lines, ships, rivers, and even highways are also subject to

congressional regulation, so far as is necessary to keep interstate traffic upon fair and equal terms." 379 U.S. at 271 (emphasis added). This statement provides an example of Congress' power to regulate the use of the channels of interstate commerce, rather than those activities having a substantial effect on interstate commerce.

While the take provision may have prevented the hospital renovations in **NAHB** or the commercial developments in the case at hand, ESA does not *directly* regulate these activities. The **NAHB** dissent noted:

An alternative reading of Judge Henderson's second justification with its stress on the effect of the regulation upon the highway and hospital is that she concludes that Congress may regulate purely intrastate activities - e.g., the habitat modification of the fly - where the *regulation* will then affect items which are arguably in interstate commerce. Again, I do not see the stopping point. Congress is not empowered either by the words of the Commerce Clause or by its interpretation in **Lopez** to regulate any non-commercial activity where the regulation will substantially affect interstate commerce.... Nowhere is it suggested that Congress can regulate activities not having a substantial effect on commerce *because the regulation itself can be crafted in such a fashion as to have such an effect.*

Id. at 1067 (Sentelle, J., dissenting)(emphasis added). As noted, however, Judge Henderson did not rely *primarily* on the commercial development, but instead analyzed the expressly regulated activity - the takes' effect on biodiversity.

Gibbs held Congress did not exceed its Commerce Clause power by regulating red wolf takes. 214 F.3d at 487. The wolves had been reintroduced on federal land, but had roamed onto private land in North Carolina and Tennessee. In holding the wolves had a substantial effect on interstate commerce, a divided panel noted that the take provision limited the ability to protect livestock and other agricultural products from the wolves: "The regulation here targets takings that are *economically motivated* - farmers take wolves to protect valuable livestock and crops." *Id.* at 495 (emphasis added). As discussed *infra*, **Gibbs** held primarily, however, that the expressly regulated activity - red wolf takes, regardless of farmers' motivations - was economic in nature.

In the light of the successful *facial* challenges in **Lopez** and **Morrison** and the emphasis our court and sister circuits have placed on the economic nature *vel non* of the expressly regulated activity, the district court erred in looking primarily to plaintiffs' commercial motivations.

B.

As discussed earlier, there are two ways in which intrastate activity can substantially affect interstate commerce: the activity can be of a nature and scope that it, alone, has such an effect; and, in certain circumstances, the activity can be aggregated with similar activities, so that the sum of the activities has the requisite substantial effect. As also

discussed, FWS contends regulation of Cave Species takes is proper under either method. For either, the goal remains the same: distinguishing between "what is truly national and what is truly local". **Morrison**, 529 U.S. at 617-18; **Lopez**, 514 U.S. at 567-68; **Ho**, 311 F.3d at 601.

1.

In urging Cave Species takes, alone, have a "direct relationship" with, and substantial effect on, interstate commerce, FWS claims two significant effects: the "substantial" scientific interest generated by the Cave Species; and their *possible* future commercial benefits.

a.

Concerning the scientific interest effect, some scientists have studied the Cave Species. In doing so, some of them have traveled to Texas. In coordination with this research, some Cave Species have been transported to and from museums in five States. Finally, articles about the Cave Species have been published in scientific journals.

According to FWS, this demonstrates the Cave Species "play a role in interstate commerce". Obviously, even assuming this is true, this does not necessarily constitute the substantial effect mandated by **Lopez** and **Morrison**. To the extent FWS contends that the loss of the Cave Species would affect the scientific travel or publication industries, it offers no evidence that it would

substantially do so. In fact, the minimal evidence presented by FWS indicates such an effect would be negligible.

In upholding the red wolf take provision, **Gibbs** held the takes “implicate[d] a variety of commercial activities and [was] closely connected to several interstate markets”. 214 F.3d at 492. Chief among them were red-wolf-related tourism, “scientific research”, and the “commercial trade” in pelts. **Id.** at 493-95. **Gibbs** held the “takings of red wolves in the aggregate have a sufficient impact on interstate commerce”. **Id.** at 493. (As discussed, **Gibbs** also observed that the takes were motivated by commercial incentives.)

Obviously, the commercial impact of red wolves is significantly greater than that of the Cave Species. See **id.** at 493-94 (“According to a study ... the recovery of the red wolf and increased visitor activities could result in a significant regional economic impact. [The study’s author] estimates that northeastern North Carolina could see an increase of between \$39.61 and \$183.65 million per year in tourism-related activities” (internal citation omitted).).

In the case of the Cave Species, any connection between takes and impact on the scientific travel or publication industries is, as noted, negligible. Under **Morrison’s** fourth consideration, any claim that the connection rises to a “substantial relationship” is far too attenuated to pass muster.

b.

Alternatively, FWS claims future commercial benefits derived from the Cave Species will be significant enough to substantially affect interstate commerce. Research concerning certain endangered species has been used in the treatment of disease. *See, e.g.,* Holly Doremus, *Patching the Ark: Improving Legal Protection of Biological Diversity*, 18 *ECOLOGY L.Q.* 265, 270-71 (1991) (study of endangered pupfish in relation to kidney disease); Keith Rizzardi, *Toothless? The Endangered Manatee and the Florida Manatee Sanctuary Act*, 24 *FLA. ST. U. L. Rev.* 377, 380 (1997) (study of endangered manatees in relation to hemophilia).

FWS posits here:

The value of the cave species ... *may* be even more significant than those of the pupfish and the manatee, given the unique features of cave species. *Although little is yet understood about these particular species*, scientists have long observed that cave species, because of their peculiar habitats, often exhibit incredibly low metabolic rates and possess extremely long life-spans ... compared to other invertebrates. Such characteristics suggest that further study of these species *could* lead to important developments in our understanding of longevity....

(Emphasis added; internal citations and quotations omitted). In short, this claim is not supported by evidence concerning Cave Species. It is conjecture.

This contention, whatever its merits may ultimately be, runs afoul of the attenuation consideration. The *possibility* of future

substantial effects of the Cave Species on interstate commerce, through industries such as medicine, is simply too hypothetical and attenuated from the regulation in question to pass constitutional muster. See **Morrison**, 529 U.S. at 612.

2.

In the alternative, FWS contends that Cave Species takes may be aggregated with those of all other endangered species. As noted, plaintiffs concede this aggregation would have the requisite substantial effect on interstate commerce. See **NAHB**, 130 F.3d at 1053-54 ("In the aggregate, however, we can be certain that the extinction of the species and the attendant decline in biodiversity will have a real and predictable effect on interstate commerce.").

At issue is what circumstances must be present in order to justify aggregation when, as in this case, intrastate activity has a *de minimis* effect on interstate commerce. As noted, **Lopez** and **Morrison** instruct courts to consider, *inter alia*, the activity's economic or commercial nature. And, as discussed *supra*, one key way by which intrastate activity may be considered "economic" or "commercial" is through its importance to an economic regulatory scheme.

As noted earlier, whether an activity is economic or commercial is to be given a broad reading in this context. **Groome**, 234 F.3d at 208-09. Nevertheless, in a sense, Cave Species takes are neither economic nor commercial. There is no market for them;

any future market is conjecture. If the speculative future medicinal benefits from the Cave Species makes their regulation commercial, then almost anything would be. Moreover, unlike the red wolves (and their pelts) in *Gibbs*, there is no historic trade in the Cave Species, nor do tourists come to Texas to view them.

FWS posits that, because, in the aggregate with other endangered species, Cave Species takes will have a substantial effect on interstate commerce, these takes can be classified as commercial. To accept such a justification would render meaningless any "economic nature" prerequisite to aggregation. An activity cannot be aggregated based solely on the fact that, post-aggregation, the sum of the activities will have a substantial effect on commerce. This would vitiate *Lopez* and *Morrison's* seeming requirement that the intrastate instance of activity be commercial. Noneconomic and noncommercial activity could be aggregated so long as, if aggregated, it would have a substantial effect. *Lopez* and *Morrison* stand against such a proposition.

On the other hand, the regulation of the Cave Species is part of a larger regulation of activity. The take provision as applied to the Cave Species is part of the take provision generally and ESA as a whole. More is required, however. As discussed earlier, non-commercial, intrastate activities must be "essential" to an economic regulatory scheme's efficacy in order, under this rationale, for aggregation to be appropriate.

First, the larger regulation must be directed at activity that is economic in nature. *Lopez*, 514 U.S. at 561. See also *Morrison*, 529 U.S. at 610. ESA states that endangered species are of "esthetic, ecological, educational, historical, recreational, and scientific value...." 16 U.S.C. § 1531(a)(3). Along this line, courts may also look to ESA's legislative history. *Morrison*, 529 U.S. at 612. In this light, ESA's protection of endangered species is economic in nature. As noted, ESA's drafters were concerned by the "incalculable" value of the genetic heritage that might be lost absent regulation. See H.R. Rep. No. 93-412, at 4. With regard to a precursor to ESA, the Senate Report observed:

From a pragmatic point of view, the protection of an endangered species of wildlife with some commercial value may permit the regeneration of that species to a level where controlled exploitation of that species can be resumed. In such a case businessmen may profit from the trading and marketing of that species for an indefinite number of years, where otherwise it would have been completely eliminated from commercial channels in a very brief span of time. *Potentially more important*, however, is the fact that with each species we eliminate, we reduce the [genetic] pool ... available for use by man in future years. Since each living species and subspecies has developed in a unique way to adapt itself to the difficulty of living in the world's environment, as a species is lost, its distinctive gene material, which may subsequently prove invaluable to mankind in improving domestic animals or increasing resistance to disease or environmental contaminant, is also irretrievably lost.

S. Rep. No. 91-526, at 1415 (1969) (emphasis added).

Aside from the economic effects of species loss, it is obvious that the majority of takes would result from economic activity. See, e.g., 16 U.S.C. § 1531(a)(1) ("various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation"); 16 U.S.C. § 1533(f) (recovery plans should give priority to species that are in "conflict with construction or other development projects or other forms of economic activity..."). Indeed, Congress' findings are reflected in the case at hand: the Cave Species takes would occur as a result of plaintiffs' planned commercial development.

Moreover, ESA is "truly national" in scope. See *Morrison*, 529 U.S. at 617-18; *Lopez*, 514 U.S. at 567-68. This is the case, despite the concerns raised by amicus State of Texas. It is true that land use and wildlife preservation are traditional areas of state concern. Nevertheless, "this authority is shared with the Federal Government when [it] exercises one of its enumerated constitutional powers". *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 204 (1999).

Second, in order to aggregate, the regulated intrastate activity must also be an "essential" part of the economic regulatory scheme. Judge Wald's opinion in *NAHB* held ESA's take provision constitutional as applied to an intrastate species of insect. Key to this conclusion, and challenged by the other two

panel members, was the determination that individual takes of the species could be aggregated. The opinion assumed aggregation, holding that, because "biodiversity has a ... substantial ... effect on ... interstate commerce, 'the *de minimis* character of individual instances arising under [ESA] is of no consequence'". 130 F.3d at 1053, n. 14 (quoting **Lopez**, 514 U.S. at 558).

The opinion did not discuss, however, **Lopez**' earlier requirement that *de minimis* instances of activity subsumed within a regulatory scheme must be *essential* to that scheme, so that it could be *undercut* without the particular regulation. 514 U.S. at 561. Along this line, the **NAHB** dissent noted: "There is no showing, but only the rankest of speculation, that a reduction or even complete destruction of the viability of the [species] will in fact affect land and objects that are involved in interstate commerce". 130 F.3d at 1065 (Sentelle, J., dissenting) (internal citations and quotations omitted).

In **TVA**, however, the Court recognized that "Congress was concerned [not only] about the *unknown* uses that endangered species might have[, but also] about the *unforeseeable* place such creatures may have in the chain of life on this planet". 437 U.S. at 178-79 (emphasis in original). Citing that portion of **TVA**, **Gibbs** reaffirmed Congress' power to "manage the interdependence of endangered animals and plants in large ecosystems". 214 F.3d at 496. See also **NAHB**, 130 F.3d at 1052 n.11; *id.* at 1058 (Henderson,

J., concurring) ("The effect of a species' continued existence on the health of other species within the ecosystem seems to be generally recognized among scientists.").

FWS contends: "Allowing a particular take to escape regulation because, viewed alone, it does not substantially affect interstate commerce, would undercut the ESA scheme and lead to piece-meal extinctions". Along this line, it maintains that takes of any species threaten the "interdependent web" of all species. Congress described this "critical nature of the interrelationships of plants and animals between themselves and with their environment". H.R. Rep. No. 93-412, at 6. In fact, according to Congress, the "essential purpose" of ESA is "to protect the ecosystems upon which we and other species depend". *Id.* at 10.

ESA's take provision is economic in nature and supported by Congressional findings to that effect. Although, as noted, there is no express jurisdictional element in ESA, our analysis of the interdependence of species compels the conclusion that regulated takes under ESA do affect interstate commerce. In this sense, ESA's take provision *is limited* to instances which "have an explicit connection with or effect on interstate commerce". *Morrison*, 529 U.S. at 611-12 (internal quotations omitted).

Finally, the link between species loss and a substantial commercial effect is not attenuated. This holding will not allow Congress to regulate general land use or wildlife preservation.

See *id.* at 612-13 ("We rejected these ... arguments because they would permit Congress to 'regulate not only all violent crime, but all activities that might lead to violent crime....'" (quoting *Lopez*, 514 U.S. at 564)).

ESA is an economic regulatory scheme; the regulation of intrastate takes of the Cave Species is an essential part of it. Therefore, Cave Species takes may be aggregated with all other ESA takes. As noted, plaintiffs concede such aggregation substantially affects interstate commerce. In sum, application of ESA's take provision to the Cave Species is a constitutional exercise of the Commerce Clause power.*

III.

For the foregoing reasons, the judgment is

AFFIRMED.

* FWS also contends that the "take" provision enables the United States to meet its treaty obligations and was enacted because of a concern about Congress' Commerce Clause power, pursuant to Article I, § 8, cl. 3, "[t]o regulate Commerce with foreign Nations". We need not reach this issue.

DENNIS, Circuit Judge, concurring:

I join in the Court's opinion and write separately only to set forth additional analysis in support of the Court's conclusion.

The plaintiffs contend that Congress lacks the authority to regulate, under the ESA, activity that endangers or threatens intrastate, non-commercial species. The Court correctly upholds the challenged ESA provision as applied to such species.

One express purpose of the ESA is to provide a comprehensive program for the conservation of endangered and threatened species and the ecosystems upon which they depend. The extinction or harm of endangered or threatened species has a substantial impact upon interstate commerce because in many cases those species or products derived from them are articles of commerce. Further, their extinction or harm could have a significant deleterious effect upon interstate commerce between the states by adversely affecting the commercial intercourse of non-endangered species or their derivatives. Finally, the conservation of the ecosystems upon which these commercial species depend may require the regulation of activities harmful to non-commercial species concentrated within a single state or region. Consequently, Congress has the authority to make a rational determination to conserve such non-commercial, intrastate species as an essential or integral part of the comprehensive ESA program that regulates activities having a substantial impact on interstate commerce.

At least as early as United States v. Darby, the Supreme Court recognized that Congress has the power to regulate intrastate activities that it rationally finds necessary to regulate in order to effectuate its regulation of interstate commerce.¹ In Darby, emphasis was placed on whether the regulation was an "appropriate means to the attainment of a legitimate end, the exercise of the granted power of Congress to regulate interstate commerce."² This approach harks back to McCulloch v. Maryland, which noted that the Constitution authorizes Congress to make "all laws which shall be necessary and proper for carrying into execution the foregoing powers."³ Chief Justice Marshall found that the Necessary and Proper clause accords to Congress

that discretion, with respect to the means by which the powers it confers are to be carried into execution, which will enable that body to perform the high duties assigned to it, in the manner most beneficial to the people. Let the end be legitimate, let it be within the scope of the constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but consist with the letter and spirit of the constitution, are constitutional.⁴

Darby also pointed out that the Court had often sustained legislation enacted under powers other than the Commerce Clause,

¹ 312 U.S. 100 (1941).

² Id. at 118.

³ 17 U.S. 316, 411-12 (1819) (quoting U.S. Const. art. I, § 8, cl. 18); see Robert L. Stern, The Commerce Clause and the National Economy, 1933-1946, 59 Harv. L. Rev. 883, 890 (1946).

⁴ McCulloch, 17 U.S. at 421.

"when the means chosen, although not themselves within the granted power, were nevertheless deemed appropriate aids to the accomplishment of some purpose within an admitted power of the national government."⁵ A similar approach had been used in cases applying the Commerce Clause to intrastate activities "when the intrastate transactions were so commingled with or related to interstate commerce as to demand that all be regulated if the interstate commerce were to be effectively controlled."⁶

Indeed, the Supreme Court's cases, from Darby to the present, confirm that Congress has the authority under the Constitution, through the intersection of the Commerce Clause and the Necessary and Proper Clause, to regulate an intrastate activity that it could not reach standing alone, if the regulation is essential or integral to the maintenance of a larger regulatory scheme properly governing interstate commerce.⁷ This rule has recently been

⁵ Darby, 312 U.S. at 121 (citing Jacob Ruppert, Inc. v. Caffey, 251 U.S. 264 (1920); James Everard's Breweries v. Day, 265 U.S. 545, 560 (1924); Westfall v. United States, 274 U.S. 256, 259 (1927)).

⁶ Stern, The Commerce Clause, 59 Harv. L. Rev. at 891 (citing Houston, E.& W. Tex. Ry. Co. v. United States, 234 U.S. 342 (1914) (Shreveport Rate Cases); Railroad Comm'n of Wis. v. Chicago Burlington & Quincy Ry. Co., 257 U.S. 563 (1922); Southern Ry. Co. v. United States, 222 U.S. 20 (1911); Baltimore & Ohio Ry. Co. v. ICC, 221 U.S. 612 (1911)).

⁷ See, e.g., United States v. Lopez, 514 U.S. 549, 561 (1995) (finding that the regulation of gun possession near schools under the Gun-Free School Zones Act was "not an essential part of a larger regulation of economic activity, in which the regulatory scheme could be undercut unless the intrastate activity were regulated"); Hodel v. Indiana, 452 U.S. 314, 329 n.17 (1981) ("A

designated by one scholar as the "comprehensive scheme" principle.⁸ This Court and its judges have, in effect, recognized the principle by concluding that both commercial and noncommercial activity may be regulated by Congress if the regulation is an essential or integral part of a larger comprehensive scheme properly regulating activity substantially affecting interstate commerce.⁹

complex regulatory program . . . can survive a Commerce Clause challenge without showing that every single facet of the program is independently and directly related to a valid congressional goal. It is enough that the challenged provisions are an integral part of the regulatory program and that the regulatory scheme when considered as a whole satisfies [the substantial effect] test."); Maryland v. Wirtz, 392 U.S. 183, 192-93 (1968) (refusing to "excise, as trivial, individual instances" of regulation because the effect of such excision would be to undermine the effectiveness of the regulatory program); United States v. Wrightwood Dairy Co., 315 U.S. 110, 121 (1942) (stating that Congress has the power to enact such regulations of intrastate activity as are "necessary and appropriate" to make the regulation of interstate commerce effective); Darby, 312 U.S. at 118 ("[Congress's power] extends to those activities intrastate which so affect interstate commerce or the exercise of the power of Congress over it as to make regulation of them appropriate means to the attainment of a legitimate end, the exercise of the granted power of Congress to regulate interstate commerce."); NLRB v. Jones & Laughlin Steel Corporation, 301 U.S. 1, 36 (1937) ("The congressional authority to protect interstate commerce from burdens and obstructions is not limited to transactions which can be deemed to be an essential part of a 'flow' of interstate or foreign commerce.").

⁸ See Adrian Vermeule, Does Commerce Clause Review Have Perverse Effects? 46 Vill. L. Rev. 1325 (2001); Adrian Vermeule, Centralization and the Commerce Clause, 31 Env'tl. L. Rep. 11334 (2001).

⁹ See Groome Resources Ltd. v. Parish of Jefferson, 234 F.3d 192, 205 (5th Cir. 2000) ("[A] close reading of Lopez . . . provides two recognized and historically rooted means of congressional regulation under the commerce power: (1) whether the activity is 'any sort of economic enterprise, however broadly one might define those terms'; or (2) whether the activity exists as 'an essential part of a larger regulation of economic activity, in

The free-standing statutes at issue in Lopez and United States v. Morrison¹⁰ addressed intrastate offenses of the kind that have been traditionally dealt with by state legislation. Neither statute was an integral or ancillary part of a comprehensive scheme reasonably designed to regulate activity having a substantial effect on interstate commerce. In Lopez the Court held that the Gun-Free School Zones Act, which made it a federal offense to knowingly possess a firearm in a known or reasonably recognizable school zone, exceeded Congress' commerce clause authority because the criminalized conduct was not an economic activity that substantially affected interstate commerce. The Court expressly

which the regulatory scheme could be undercut unless the intrastate activity were regulated.'" (quoting Lopez, 514 U.S. at 561)); United States v. Bird, 124 F.3d 667, 675 (5th Cir. 1997) ("As a federal criminal statute regulating intrastate noncommercial conduct, [the challenged section of the Freedom of Access to Clinic Entrances Act] must be justified, if at all, as 'an essential part of a larger regulation of economic activity, in which the regulatory scheme could be undercut unless the intrastate activity were regulated.'" (quoting Lopez, 514 U.S. at 561)); see also United States v. Hickman, 179 F.3d 230, 231 (5th Cir. 1999) (en banc) (Higginbotham, J., dissenting) ("Congress may protect, enhance, or restrict some particular interstate economic market, such as those in wheat, credit, minority travel, abortion service, illegal drugs, and the like, and Congress may regulate intrastate activity as part of a broader scheme."); United States v. Kirk, 105 F.3d 997, 1014 (5th Cir. 1997) (en banc) (Jones, J., dissenting) (stating that the most critical consideration in determining the constitutionality of a statute prohibiting certain possessions of machine guns is whether it "fulfills the mission of regulating interstate commerce as (1) a regulation of economic activity which, although itself local, has substantial effect on interstate commerce, or (2) a regulation of activity which is essential to maintaining a larger, interstate regime of economic activity.").

¹⁰ United States v. Morrison, 529 U.S. 598 (2000).

noted that the statute was not an essential part of a larger regulation of economic activity, in which the regulatory scheme would be undercut unless the intrastate activity were regulated.¹¹ Similarly, in Morrison the Court held that the Commerce Clause does not authorize Congress to enact a federal civil remedy for the victims of gender-motivated violence. The Court stated that gender-motivated crimes of violence are not economic activity substantially affecting interstate commerce.¹²

In this case, by contrast, the prohibition of the Cave Species takes is integral to achieving Congress's rational purpose in enacting the ESA. In particular, the ESA regulates interstate commerce by attempting to prevent the extinction of both commercial and non-commercial species. Regulations under the ESA therefore significantly affect the nation's economy and welfare. Non-commercial species are in many instances vital to the survival of ecosystems upon which commercial species are dependent. The interrelationship of commercial and non-commercial species is so complicated, intertwined, and not yet fully understood that Congress acted rationally in seeking to protect all endangered or threatened species from extinction or harm. The ESA is a necessary and proper means not only to conserve the nation's valuable biological resources, but also to promote interstate commerce

¹¹ Lopez, 514 U.S. at 561.

¹² Morrison, 529 U.S. at 613.

involving those resources. While some states, including Texas, have taken steps to protect species against extinction, the threat of extinction of species and loss of their habitat is both a worldwide and a national problem that requires at least a comprehensive national solution. Furthermore, as the Congress recognized, some of the presently covered non-commercial species will prove to be of "incalculable" future value to the nation and its economy because they are sources of genetic, scientific, and biomedical research and development that will likely facilitate the production of commercial goods, services, and techniques.

Thus, as the opinion states, the constitutionality of the FWS's regulation of the Cave Species takes does not depend on aggregating the effects of all takes of endangered species in order to arrive at a sum effect on interstate commerce that is, post-aggregation, substantial. Put another way, the constitutionality of any particular application of the ESA take provision does not depend on adding up "a large number of small but definite [economic] impacts from each insect or plant of an endangered species" to reach a substantial effect on interstate commerce.¹³ Rather, the FWS can prohibit the Cave Species takes because such regulation is essential to the efficacy of—that is, the regulation is necessary and proper to—the ESA's comprehensive scheme to

¹³ Charles Tiefer, After Morrison, Can Congress Preserve Environmental Laws from Commerce Clause Challenge? 30 *Env't'l L. Rep.* 10888 (2000).

preserve the nation's genetic heritage and the "incalculable" value inherent to that scarce natural resource, and because that regulatory scheme has a very substantial impact on interstate commerce.